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A project to provide basic education, counseling and occupational training to 125 unemployed or underemployed heads of families or households from rural areas of Alabama, and to secure employment for them at the conclusion of the program was conducted at Tuskegee. The four technical areas in which training was offered were brickmasonry, carpentry, meat processing, and nurse aide. Distinguishing characteristics of the project included its emphasis on research, experimentation, and demonstration. Training was designed to provide (1) observation of what happened in the training, (2) analysis of its effect on trainees, and (3) a determination of how this experience brought about the measured results. Part I of the report concerns the rationale of the project. Recruitment, selection, and a description of the trainees are dealt with in Part II. Part III includes a description of the processes and techniques used in providing basic education, counseling, and technical skill training. It also includes an account of an experiment involving selected communities from which some of the trainees come. Part IV provides data on the evaluation of the performance of the trainees, relates the activities involved in job development, placement and followup, and contains an analysis with conclusions of the entire project. (MU)

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# FINAL REPORT

## EXPERIMENTAL AND DEMONSTRATION PROJECT FOR RURAL WORKERS

## AT TUSKEGEE INSTITUTE

1966-1967

AUGUST 31, 1968

TUSKEGEE INSTITUTE
Tuskegee Institute, Alabama

VT007593
7503

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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FINAL REPORT

to

U.S. DEPARTMENT OF LABOR THROUGH THE OFFICE OF
MANPOWER ADMINISTRATION AND THE ALABAMA
STATE EMPLOYMENT SERVICE

Contract No. 82-01-66-35

and

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
THROUGH THE OFFICE OF EDUCATION AND THE ALABAMA
STATE DEPARTMENT OF VOCATIONAL EDUCATION

Project No. Ala. (M) 6082-000

on

# EXPERIMENTAL AND DEMONSTRATION PROJECT FOR RURAL WORKERS AT TUSKEGEE INSTITUTE (1966-1967)

February 1, 1966 to August 31, 1968

by

TUSKEGEE INSTITUTE
TUSKEGEE INSTITUTE, ALABAMA

This report on a special manpower project was prepared under contracts with the Office of Manpower Administration, U.S. Department of Labor, and the Office of Education, U.S. Department of Health, Education, and Welfare, under the authority of the Manpower Development and Training Act. Organizations undertaking such projects under the Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent the official position or policy of the Department of Labor or the Department of Health, Education, and Welfare.

# FOREWORD

Since its founding, Tuskegee Institute has offered services to the people in the primarily rural area by which it is surrounded. The recently concluded Manpower Development and Training Project at this institution was a continuation of an effort to render services to those in its proximity, and to experiment with means by which manpower problems may be solved, or at least diminished.

It is believed that the personnel who were affiliated with the Experimental and Demonstration Project for Rural Workers at Tuskegee Institute (1966-1967), have made some progress toward finding efficient ways by which disadvantaged people may be helped to acquire skills and knowledge, and to develop wholesome attitudes toward gainful employment and societal living.

This final report on the interrelated teaching, learning, counseling, job development and placement, and research activities is an accumulation of many months of fruitful experiences. It is hoped that this account of these experiences will in some measure provide direction to other agencies that may be engaged in similar endeavors.

W. Vincent Payne
Director

# ABSTRACT AND SUMMARY

The report that follows embraces the highlights of the "Experimental and Demonstration Project for Rural Workers at Tuskegee Institute (1966-1967)." This project was designed to provide basic education, counseling, and occupational training to 125 unemployed or underemployed heads of families or heads of households from rural areas of Alabama, and to secure employment for them at the conclusion of the program. The four technical areas in which training was offered were brickmasonry, carpentry, meat processing, and nurse aide.

In addition to offering the education and training mentioned, other distinguishing characteristics of the project included its emphases on research, experimentation, and demonstration. Its training aspect, as designed, was to provide the basis for observing what happened in the course of training, to analyze how the training experience affected the trainees, and to determine how this experience brought about the measured results. In an effort to achieve these purposes, several techniques were utilized:

1. A full description of each trainee was obtained upon his entry into the program.
2. Group and individual counseling was in operation throughout the training period.
3. Experimentation in instructional techniques were carried out.

4. Diagnostic and evaluative appraisals of the progress of the trainees were made.

5. Jobs were developed, and employment situations were found for those who completed the program.

6. An intensive followup after placement was conducted in an effort to measure the effectiveness of the training program.

Part 1 of the report is concerned with the rationale for the project; recruitment, selection, and a description of the trainees are dealt with in Part 2; this part also contains information on the characteristics the trainees brought with them to the training situation; Part 3 includes a description of the processes and techniques used in providing basic education, counseling, and technical skill training; it also includes an account of an experiment involving selected communities from which some of the trainees came; Part 4 provides data on the evaluation of the performance of the trainees in the training situation; it relates the activities involved in job development, placement, and followup, and it contains an analysis with conclusion of the entire project.

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# ACKNOWLEDGMENTS

Of necessity, in putting forth an effort to realize the goals of such a project as this, many persons are called upon for the benefits of their accumulated experiences, their guidance, and constructive criticisms. The assistance rendered by Doctors A. P. Torrence, B. D. Mayberry, and Theodore J. Pinnock is sincerely and gratefully appreciated.

Dr. Torrence, Vice President for Academic Affairs, and who was Director of the first MDT Project at Tuskegee Institute, was most gracious in offering his wise counsel throughout the 1966-1967 project.

Dr. Mayberry, Dean of the School of Applied Science, Director of Labor Mobility Project, and who was Associate Director of the first MDT project, was extremely cooperative. In addition to writing the original proposal, Dr. Mayberry spoke to the trainees on several occasions, and helped through Labor Mobility to relocate many of them.

Dr. Pinnock, Associate Professor of Adult Education, Director of the High School Equivalency Project, and former Director of the current MDT project, rendered invaluable assistance to the project from its incipiency. Dr. Pinnock directed the early phases of the recruitment process and his guidance with regard to many aspects of the project was of immense value.

There are many others on Tuskegee Institute's campus and beyond who gave freely of their talents and time to help make the project a success. Unfortunately circumstances do not permit their recognition here. However, the project personnel express their heartfelt gratitude to all those who are within this category.

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# PART 1

## WHY

## INTRODUCTION

# INTRODUCTION

This experimental and demonstration project was designed to develop and to test a course of training for adults who were unemployed or underemployed because of deficiencies in marketable vocational skills, and lack of basic communicative and computative competencies. The project design explicitly undertook the use of experiences gained in a previous project, and the systemization of the experiences and insights in a course of formal instruction.

The stated purposes of the project at the outset were to:

1. Experiment with a group of 125 culturally deprived heads of households to determine the degree of proficiency that can be attained in one of the four skills (brickmasonry, carpentry, meat processing, and nurse aide), and the educational grade levels on completion that are most likely to enhance this attainment.
2. Establish within the framework of the experimental design certain patterns that should be applicable to all training programs of the type being conducted at Tuskegee Institute.
3. Further test and validate the techniques and instruments used in the previous retraining project.
4. Place on jobs all trainees who have successfully completed the training program.
5. Place at the disposal of the Federal and State Governments and other appropriate organizations and agencies a well-developed system to be used in training and counseling culturally deprived heads of households and placing them on suitable jobs.

To implement these general purposes, efforts were made to achieve the following specific objectives:

1. To describe in detail the input characteristics of the trainees by using interview techniques and a carefully selected battery of tests. A well-trained diplomate in counseling psychology was employed to carry out this study of input characteristics. (Part 2, Chapter II, of this report).

2. To coordinate and fuse communicative and computative skills with technical skills. (Part 3, Chapters III and IV, of this report).

3. To maintain an intensive systematic counseling program making use of diagnostic measures to improve the coping skills of the trainees in social situations and in personal adjustment. (Part 3, Chapter V, of this report).

4. To appraise relationships between input characteristics and performance in the course of training and to determine relationship of both to job performance when training had been completed. (Part 4, Chapter VII, of this report).

5. To develop jobs for the trainees, assist in placement, and carry out extensive follow-up to determine the degree of success of the training program. (Part 4, Chapter VIII, of this report).

# PART 2

## WHO

Chapter I. Recruitment, Selection, and Description of Trainees

Chapter II. Input Characteristics of Trainees

# CHAPTER I

# RECRUITMENT, SELECTION, AND DESCRIPTION OF TRAINEES

## Recruitment

One measure of the success of the first MDT project was the widespread interest demonstrated by the many individuals who made inquiries concerning training during its operation, and after its conclusion. Although no organized plans were set up for recruitment for the second project until it was approved by the Department of Health, Education,and Welfare and the Bureau of Employment Security in January 1966, and the Department of Labor in February 1966, recruitment was a continuous process.

During the interim, the project office acknowledged receipt of and filed over 2,000 applications from individuals interested in receiving training. Those making application can be placed into two distinct categories--the "walk-ins" who came to the office to fill out applications and to inquire about the proposed project, and the "mail-ins" who wrote for applications and information. The eagerness of both groups to be included in the training was confirmed by their frequent follow-up visits, telephone calls, and letters. The counseling staff was responsible for talks with the prospective applicants when they visited the office, and for responses to telephone calls and mail inquires. Needless to day, most of the information released by the staff at this time was vague and indeterminate because the project had not been funded.

In order to prepare for, and facilitate recruitment, these plans were made and implemented:

1. All applications on file were sorted into areas for county groups.
2. Applications which did not appear to meet the criteria set by the Department of Labor and project administration were screened out.
3. Tentative selections were made of recruitment centers as determined by areas or county grouping.
4. Dates for recruitment and testing were selected and confirmed.
5. Public school officials in proposed recruitment areas were contacted by telephone and letter requesting use of school facilities.
6. Personnel needs for testing and interviewing incidental to recruitment were identified.
7. Plans to contact individuals who might qualify for training were outlined.
8. Individuals who appeared to meet qualifications of the project, and had applications on file, were informed by letter of the recruitment date for their areas.

Acknowledging and alphabetizing the 2,000 applications required several weeks of continuous work. Later, it was necessary to reassort the applications into county groups, then area groups. In addition, all applications appearing not to meet the Department of Labor and project administration criteria of eligibility were screened out. Persons who had been screened out were sent letters referring them to other projects or informing them why they did not qualify for training in this program. Determination of recruitment centers was influenced by the number of applications received from the various counties and for their proximity to the prospective applicants' communities. Seven centers within a 50-mile radius of the applicant's home were selected and identified. Applicants were informed by letter to report to the center closest to them at a designated time.

Schools were designated as centers after the project director had requested use of school facilities from the proper officials. The school officials were asked to announce the date that the recruitment team would be in their areas and to encourage individuals in the community to take advantage of the program. Cooperation of these officials greatly aided recruitment efforts.

At this time, the MDT staff had two counselors who had planned and worked out the details for the recruitment, but it was evident that additional personnel would be needed to assist in statewide recruitment. Consequently, other personnel at Tuskegee Institute were enlisted to help with the recruitment, interviewing, and testing of applicants. Past experience indicated that the grade completed (or claimed to have been completed) was not a valid index to the literacy level of an applicant. Therefore, the Gray Oral Reading Test was used to measure the reading ability of those being considered for the program. Eight persons, in addition to the two counselors, conducted the recruitment phase of the program at seven centers in the State of Alabama. All parts of the State were covered except the ten northeast counties from which no applications had been received. Recruitment teams met in Russellville, Anniston, Demopolis, Selma, Enterprise, Bay Minette, and Tuskegee Institute. Since the majority of applications had been received from Macon and adjacent counties, six days were used for recruitment at Tuskegee Institute, and one day at each of the other centers. During the eleven days of recruitment, 410 prospective trainees were interviewed and tested. The Tuskegee Institute center was open on Saturday to allow employed applicants opportunity for interviews and tests. On each recruitment trip from Tuskegee Institute, extra interview forms and tests were taken to be used for candidates who had not previously made application to the program, but manifested an interest in doing so.

At the conclusion of the February recruitment, tests were scored and reviewed along with other data from the applications and interviews, and lists were compiled of individuals meeting the selection criteria. However, very little could be done by the counseling staff except wait for further instructions from the project administration which, in turn, was waiting for the funding of the project. After a waiting period of two months, funding was provided in

May 1966.

On May 20, 1966, letters went to 264 of the 410 applicants who had been interviewed and tested in February inviting them to Tuskegee Institute for final testing and physical examinations. However, it was soon discovered that some of the applicants would not accept the invitation for a variety of reasons.

It was found that there was a need to call in more applicants in order to meet the requirements of the project. Through the cooperation of the Seasonally Employed Agricultural Workers Program, and the Labor Mobility Project, both of which are located on Tuskegee Institute's campus, the required 109 trainees (31 each in brickmasonry, carpentry, and meat processing, and 16 in nurse aide) were enrolled. It should be pointed out that a total of 32 women were trained as nurse aides during the year; however, due to the fact that the length of their period of training was for six months only, not more than 16 were in training at one time.

An effort was made through correspondence to ascertain why individuals failed to report for the final testing, physical examinations, and screening by representatives of the Alabama State Employment Service. Some of those contacted returned the post cards, but gave no reason for not appearing. Among the replies received, some of the reasons given were that the individuals had joined the Job Corps, moved to another state, joined the Armed Forces, had become employed, financial reasons, and illness. The overriding reason for the poor response seemed to be the long delay between the time the prospective participants were first contacted and the time that training was actually ready to begin.

## Selection

Individuals were accepted for training on the basis of the following criteria:

1. Head of the family or household
2. Unemployed or underemployed
3. Age
    a. Male 21 - 45*
    b. Female 30 - 45

    *There are two exceptions to this criterion in that one trainee was 20 years old when he entered training, and another was 50 years old.
4. Reading Level - The minimum reading level for acceptance into the program was 3.5 grades as determined by the Gray Oral Reading Test. However, due to the difficulty in finding a sufficient number of prospective trainees, some exceptions were made.
5. Resident of the State of Alabama
6. Good physical health
7. Two years of employment at some time in the past

## Description of Trainees

Essential to an appraisal of the performance or achievements of a group in any undertaking is a rather clear appreciation of what the group characteristics were to begin with and a description of any meaningful differences observed among those who composed the group. Two basic considerations must be made explicit about the group at the outset of an undertaking such as this training program:

1. Why are these individuals being brought together to engage in a common enterprise? The answer to this question is to be found in the stated purposes of the enterprise.

2. What are the bases for selection of the individuals to make up the group? The answer to this rests on explicit or implicit assumptions about the relation of goals to those for whom the goals are set.

The foregoing questions were answered in the project design and the answers were a contractual agreement whose stipulations predated the research decisions that had to be made subsequently.

The Revised Beta Examination was used as a measure of accumulated intellectual experience. Selection of this instrument was made on the grounds that it seemed to be more suitable than some others for use with the kind of population to which the trainees belonged. It was designed to measure general mental ability of persons who have had little formal education and even non-English-speaking persons. This test required no reading and was administered orally. None of the trainees performed at the above average or superior levels on this test. Their scores were distributed as follows:

TABLE I

SCORES OF THE REVISED BETA EXAMINATION

| I. Q. Score | Category | Trainees | |
|---|---|---|---|
| | | Number | Percent |
| 90-109 | Average | 47 | 39 |
| 80-89 | Below Average | 47 | 39 |
| 71-79 | Inferior | 18 | 15 |
| 70 and below | Defective | 9 | 7 |
| TOTAL | | 121 | 100 |

Educational Experience. The training program was designed to be an educational experience, and information about previous educational experiences seemed relevant. The simplest question to ask was "How far did you go in school?" The school grade the trainees reported having completed was designated "professed" grade since it was meaningful only to themselves. Differences in time of school attendance and differences in schools attended made the reported school grade of no other value. It was necessary to use some test to determine the level of academic achievement of the trainees. The

Gray Oral Reading Test and the Iowa Tests of Basic Skills in reading and in mathematics were used with the following results:

## TABLE II

## COMMUNICATIVE AND COMPUTATIVE SKILLS LEVELS

| School Grade Level | Reported School Grade | | Gray Oral Reading Test Performance | | Grade Equivalent Iowa Test of Basic Skills | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reading | | Math. | |
| | No. | % | No. | % | No. | % | No. | % |
| 10-12 | 37 | 42 | 38 | 43 | 0 | 0 | 0 | 0 |
| 7-9 | 32 | 36 | 14 | 16 | 18 | 20 | 20 | 22 |
| 4-6 | 18 | 20 | 28 | 31 | 47 | 53 | 46 | 52 |
| Under 4 | 1 | 1 | 9 | 10 | 15 | 17 | 9 | 10 |
| Not given | 1 | 1 | 0 | 0 | 9 | 10 | 14 | 16 |

Using male trainees* only, it is readily seen that reported school grade had little relation to test performance, as 78 percent of this group of trainees reported having completed the seventh grade or higher. On the Gray Oral Reading Test, 59 percent showed performance at the seventh grade or above, and only 20 percent reached this level of performance on the Iowa Tests of Basic Skills reading test.

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*Unless otherwise indicated, statistics in this report are for the 89 of the 93 trainees enrolled who remained throughout the course.

Opinions about their school experience were not sharply focused. Most of the trainees felt they had been average or successful in their school work; only 16 percent reported the school experience to have been difficult. They generally liked the subjects studied without preferences; less than five percent reported liking only one or no subject, and 31 percent reported disliking two or more subjects. Half of them had no idea how they ranked in their classes, and 18 percent thought they were in the upper 25 percent of their classes. Twenty-seven percent felt the education they received to be sufficient to achieve the goals they had set for themselves.

Family Background. The trainees were rural and small town dwellers; the homes of 83 percent were in rural communities or in towns of less than 5,000 population. Only one trainee lived in a town with more than 15,000 population. The age distribution was:

TABLE III

AGE DISTRIBUTION

| Years | Number | Percent |
|---|---|---|
| Under 25 | 19 | 21 |
| 25 - 34 | 30 | 34 |
| 35 and older | 40 | 45 |
| TOTAL | 89 | 100 |

Marital status reported was 71 percent were married; 10 percent had been married, but were not living with spouse; and 19 percent were unmarried. Thirty-three percent owned the home they occupied; 39 percent lived in rented quarters and the remainder lived with relatives or had some other arrangement. Of the 30 trainees who reported owning their homes, only half of them had purchased the property themselves.

More than one third (35 percent) of the trainees had four or more children; 15 percent, three children; 15 percent, two children; 17 percent, one child; and 18 percent, no children. They had begun families early; only seven percent of those with children had their first child after age thirty.

The trainees had grown up in large families; 63 percent had four or more siblings and another 13 percent had three siblings. Eighty-seven percent reported living their childhood years in rural areas, or in places of less than 15,000 population; 86 percent of the fathers of the trainees had an eighth-grade education or less, and 14 percent more than an eighth-grade education. Only three percent reported their fathers' occupations as being other than laborer, service worker, or farmer.

Verbal comments on memories of home life are of dubious value, but for what they may be worth, 63 percent of the trainees reported growing up in a home with both parents. Only six percent reported an unhappy home life as children; 77 percent reported no preference for one or the other parent; 63 percent considered their parents to have been successful or partly successful. When parent-child relationships were inquired about, 71 percent reported being included in leisure-time activities of parents often or most of the time. In getting help with their teenage problems, mother was reported as giving help in 60 percent of the cases, and father in 22 percent of the cases. Only 20 percent reported adult consideration with them of possible occupational choices, while 90 percent of them felt that their parents wanted them "to do better" than the parents in a vague generalized way.

Employment Record. Eighty-two percent of the trainees had been fully employed for more than two years, and nearly half of them (46 percent) had worked on one or two jobs, and 35 percent on three or more jobs. Their employment had not been occupationally consistent, and apparently they had worked at whatever jobs they could get since only 18 percent reported that their jobs had been highly related. Thirty-eight percent were employed when they applied for the training program, and of those who were unemployed, 13 percent had been unemployed for six months or more. Twenty percent reported their annual earnings in most recent employment to be more than

$3,000. More than 50 percent had worked on one job less than three years.

Financial Status. Current monthly living expenses were reported as being less than $250 by 57 percent, and less than $350 by 90 percent. Only 11 percent reported saving 10 percent or more of their incomes. Twenty-five percent spent 40 percent or more of their incomes on monthly credit payments, and 49 percent spent less than 10 percent on such payments. In terms of total assets, 20 percent were in debt, and 58 percent reported assets of less than $5,000. Sixty-three percent had less than $10,000 in life insurance.

Social Participation. The trainees as a group were a stable population; 62 percent of them had lived at their present address for eight or more years, and 75 percent for five or more years. As might be expected of rural people, the trainees were not "joiners"; 25 percent belonged to no organization, and 47 percent belonged to one or two; 53 percent to no affiliate of a national organization. Only 20 percent reported participation in community activities.

Health. Only 8 percent reported freedom from minor illnesses. Self-diagnosis of headache, backache, stomach trouble, and other illnesses were reported by 85 percent of the men. Eighty-two percent reported never having been hospitalized, and 12 percent having been hospitalized once. Only 8 percent reported having been absent from work for 10 days or more because of illness. Only 9 percent considered themselves not to be healthy.

These trainees, of limited circumstances, opportunities, and in some instances, experiences, posed many perplexing problems. Thirty-five specific problem concerns for the trainees in one area, carpentry, were revealed--concerns of vocational, educational, social and personal nature. To those with badly distorted perceptions and negative outlooks, the world appeared to be an unfriendly, sometimes hostile place. This narrow view of life affected the general attitude of the individual; among the effects being the reduction of his ability to function successfully and to adjust progressively. This type of personality readily distrusted others and felt that people would take unfair advantage of him. Group counseling enabled this kind of person to identify with others, to become aware that others shared his problems, and to realize that he was not a unique person. Sensing his feelings of inadequacy, his peers encouraged him toward more positive thinking and supported the counselor in her attempts to redirect his thinking toward more realistic and positive channels. At times, nevertheless, others shared his feelings and supported him in his negativism.

In profile, the average male trainee was:

1. Thirty-five years old.
2. Married.

3. Had four children.
4. Previously employed as unskilled worker.
5. Had lived most of his life in a rural area, or in a town of less than 5,000 population.
6. Was functionally literate between the fifth and sixth grade.
7. Tested as low average in intelligence as measured by the I.Q. test used.

The next chapter will include a report on the results of a variety of tests which were administered to the trainees early in the program.

# CHAPTER II

## INPUT CHARACTERISTICS OF TRAINEES

As indicated previously, many tests were administered early in the program in order to get as accurate an assessment as possible of the abilities, traits, and aptitudes of the trainees prior to their being influenced by the exposure to the new experiences being offered. Understandably, there was considerable opposition to the tests on the part of some of the trainees; many of them raised the question of the necessity of taking so many tests in order to learn an occupational skill. When it was explained to them that the purpose of the tests was to find out what their needs were so that they could be helped, they were somewhat less reluctant to cooperate.

Due to the fact that the majority of the tests were verbal, and required a fairly high degree of reading ability, it was necessary for the examiners to read and interpret the questions to those trainees who were handicapped by the lack of reading skills.

There are no sure indicators of how trainees will perform either in the course of training or on jobs following training. Evaluation of the effect of training, however, depends upon measures of what trainees bring to the training or acceptance of assumptions about them in this regard. Such measures of potential as are available were not designed for a population like the one from which the Tuskegee Institute trainees came. The most the psychologist or social scientist can do in setting the framework for evaluating the training of the culturally disadvantaged is to select instruments that hopefully may describe the input characteristics of trainees who undergo a training program.

Dr. Emma W. Bragg, Ph. D., Diplomate in Counseling Psychology, then Professor of Counseling Psychology at Tuskegee Institute, served the project from May until September 1966, as Director of Counseling, and subsequently became its consultant. She chose the instruments to be used in describing input characteristics, administered them, and prepared a painstaking report of the results. This report is excerpted from Dr. Bragg's precisely professional presentation of 176 pages which include 98 tables of sophisticated statistical analysis.

The report given here is for laymen of whatever description who are concerned about training the disadvantaged. Instead of Dr. Bragg's statistics, simple descriptive tabulations are given. The simple object of this report is to indicate what psychological equipment the trainees had when they entered the training program. Later in the report, relationships between input of the trainees and output of the training program will be examined for meaningful relations, if there are such.

The order of inquiry into input characteristics is:

1. Occupational Interests
2. Aptitudes

3. Intellectual Ability
4. Perceptual Ability
5. Initial Skills Proficiency
6. Personality and Adjustment

The tests given and reported on are listed below:

1. Closure Flexibility (Concealed Figures). L. L. Thurstone and T. E. Jeffrey, The Psychometric Laboratory. The University of North Carolina, 1956.

2. Closure Speed (Gestalt Completion). L. L. Thurstone and T. E. Jeffrey, The Psychometric Laboratory. University of North Carolina, 1956.

3. Perceptual Speed (Identical Forms). L. L. Thurstone and T. E. Jeffrey, The Psychometric Laboratory. The University of North Carolina, 1956.

4. Work Interest Index (Non-Verbal). Melany E. Baehr, and Richard Renck, Robert K. Burns, Industrial Relations Center. University of Chicago, 1959.

5. Non-Verbal Reasoning Test. Raymond J. Corsini, Industrial Relations Center. The University of Chicago, 1966.

6. Verbal Reasoning. Raymond J. Corsini and Richard Renck, Industrial Relations Center. The University of Chicago, 1958.

7. Flags: A Test of Space Thinking. L. L. Thurstone and T. E. Jeffrey, The Psychometric Laboratory. The University of North Carolina, 1956.

8. Intuitive Mechanics. L. L. Thurstone and T. E. Jeffrey, 1956.

9. Mechanical Movements. L. L. Thurstone and T. E. Jeffrey, The Psychometric Laboratory. The University of North Carolina, 1956.

10. *Understanding Communication.* Thelma G. Thurstone, The School of Education. The University of North Carolina, 1956.

11. *Word Fluency.* Developed by Industrial Relations Center, 1961.

12. *Cree Questionnaire.* Thelma G. Thurstone and John Mellinger, The Psychometric Laboratory. The University of North Carolina, 1957.

13. *Emo Questionnaire.* George O. Baehr and Melany E. Baehr, 1962.

14. *A. C. Test of Creative Ability.* A. C. Spark Plug Division of the General Motors Corporation, 1953.

15. *Personal History Index.* Melany E. Baehr, Robert K. Burns, and Robert N. McMurry, 1965.

16. *A. V. Index:* Experimental Test of Achievement Value. Developed by Sheppard and Belitsky. *The Job Hunt: Job-Seeking Behavior of Unemployed Workers in a Local Economy.* John Hopkins Press, Chapter 7, p. 36, 1966.

17. *J. I. A. Inventory.* Experimental Test of Job Interview Anxiety. Developed by Sheppard and Belitsky. *The Job Hunt: Job-Seeking Behavior of Unemployed Workers in a Local Economy.* John Hopkins Press, Chapter 7, p. 50, 1966.

18. *Revised Beta Examination.* Published by the Psychological Corporation, New York, New York. C. E. Kellogg and N. W. Morton. Re-standardization, Lindner and Gurvitz, 1946.

19. *Tomkins Horn Picture Arrangement Test.* Silvan S. Tomkins and Daniel Horn, Springer Publishing Company, 44 East 23rd Street, New York 10, New York, 1965.

20. *The Cassell Group Level of Aspiration Test.* Published by Western Psychological Services. Los Angeles, California (Revised), Russell N. Cassel, 1957.

21. Minnesota Vocational Interest Inventory. Kenneth E. Clark. The Psychological Corporation, 304 East 45 Street, New York, New York, 1965.

22. The Rotter Incomplete Sentences Blank. Julian B. Rotter and Jane E. Rafferty. The Psychological Corporation (Adult Form), 1950.

23. Nichols Proficiency Test. An Experimental Test of Achievement Covering the Areas of Carpentry, Meat Cutting, Bricklaying. Developed as a graduate thesis by James Nichols under the supervision of Dr. A. P. Torrence, School of Agriculture, Tuskegee Institute.

24. Mooney Problem Check List. Leonard V. Gordon and Ross L. Mooney. The Psychological Corporation, New York, New York, (Adult Form), Revised, 1950.

25. Gray Oral Reading Test. William S. Gray. Test Division of the Bobbs-Merrill Company, Indianapolis, Indiana, 1963.

## Occupational Interest

Work Interest Index. Occupational interests of the MDT trainees as described by the Work Interest Index centered around white-collar, stylized, fairly routinized, structured jobs. Their highest interests were specifically (1) "business contact," (2) "clerical routine," (3) "artistic and stylized" factors. The "business contact" factor involved business contact in routinized and structured social situations; for example, hotel desk clerk, grocery checker, airline passenger agent, etc. The "artistic and stylized" factor involved interests in making stylized products such as glassblowers, flower maker, etc. The "clerical and routine" factor involved interests in concrete, organized procedures such as general office worker, bookkeeping machine operator, inventory clerk.

The trainees were lowest in their interests involving "authority and prestige" or independent judgment. This factor included situations which were unpredictable and which were not covered by established routines and procedures; for example, civil lawyer, newspaper reporter, etc.

All of their interests as measured by the Work Interest Index fell within the average and above average range. There were no below average interests.

The "flexibility of interests" factor showed the trainees to be "high average." This was interpreted to mean that they had many professed interests, and seemed not focused or concentrated in their interests, as measured by this test. This interpretation was based upon the fact there were no extremely high and low peaks of interest but contrarily, the pattern was homogeneously "average."

## TABLE IV

## WORK INTEREST FLEXIBILITY SCORE

| Score | Number | Percent |
|---|---|---|
| Not given | 8 | 9.0 |
| 20-29 Very low | 0 | 0.0 |
| 30-39 Low | 0 | 0.0 |
| 40-60 Average | 51 | 57.3 |
| 61-70 High | 26 | 29.2 |
| 71-80 Very high | 4 | 4.5 |

Comparing the occupational profile of the trainees with the several occupational norm groups reported in the test manual, we can see that the trainees did not seem to fit the profile of any reported occupational group.

As to "aspiration level," the trainees were described on this test as low average. This finding was accounted for by the fact that the three factors which the trainees were highest in, had also the lowest status ratings.

TABLE V

WORK INTEREST INDEX ASPIRATION SCORE

| Score | Number | Percent |
|---|---|---|
| Not given | 8 | 9.0 |
| 20-29 Very low | 0 | 0.0 |
| 30-39 Low | 8 | 9.0 |
| 40-60 Average | 72 | 80.9 |
| 61-70 High | 1 | 1.1 |

Minnesota Vocational Interest Inventory. The Minnesota Vocational Interest Inventory, a recently published (1965) instrument, is designed to measure the vocational interests of persons at the non-professional level who seek employment without having attended college; those planning to enter skilled, semi-skilled and unskilled occupations. As shown in the Work Interest Index or the Minnesota Vocational Interest Inventory, trainees showed lowest interest in the mechanical occupations. The occupations for which the trainees were prepared included bricklaying, carpentry, meat cutting, and nurse aide. All of these occupations involved manual skill and in some aspects, mechanical skill.

On the whole, the trainees tended to show no preference for outdoor occupations. The trades of carpentry and brickmasonry, for which some of the trainees were prepared required outdoor working conditions. Here, as in the Work Interest Index, the trainees appeared not highly or differentiatingly interested in the occupations for which they had professed interest, and for which they were trained.

With respect to the separate occupational scales in this inventory, it may be said that the trainees preferred occupations labeled "white collar" as opposed to "blue collar" and "clean hands" as opposed to "dirty hands," "clerical and routinized" as opposed to "technical and mechanical."

TABLE VI

MINNESOTA VOCATIONAL INTEREST INVENTORY

| | Number | | Percent | |
|---|---|---|---|---|
| | Highest | Lowest | Highest | Lowest |
| Mechanical | 1 | 31 | 1.1 | 34.8 |
| Health Service | 3 | 3 | 3.4 | 3.4 |
| Office Work | 17 | 4 | 19.1 | 4.5 |
| Electronics | 4 | 10 | 4.5 | 11.2 |
| Food Service | 7 | 1 | 7.9 | 1.1 |
| Carpentry | 2 | 12 | 2.2 | 13.5 |
| Sales Office | 5 | 1 | 5.6 | 1.1 |
| Clean Hands | 48 | 1 | 53.9 | 1.1 |
| Outdoors | 2 | 20 | 2.2 | 22.5 |
| Not given | 0 | 6 | 0.0 | 6.7 |

Aptitudes:

The MDT Project trainees were administered two tests for mechanical aptitude: (1) Intuitive Mechanics Tests and (2) Mechanical Movements Test, both experimental tests copyrighted by the Industrial Relations Center of the University of Chicago (1956, 1959).

Intuitive Mechanics Test (Weights and Pulleys). This test, Intuitive Mechanics, is designed to measure one of the significant components of mechanical aptitude, the so-called second space factor, defined as the ability to visualize a flexible configuration, a diagram or a drawing which has internal movement or displacement of the parts.

TABLE VII

INTUITIVE MECHANICS TEST SCORE

| Score | Number | Percent |
|---|---|---|
| Not given | 7 | 7.9 |
| 20-29 Very low | 0 | 0.0 |
| 30-39 Low | 17 | 19.1 |
| 40-60 Average | 64 | 71.9 |

Mechanical Movements Test. This test is designed to measure a significant component of mechanical aptitude--the second space factor defined as the ability to visualize a flexible configuration in which there is internal movement or displacement of the parts. The test has been found by Louis Thurstone, one of its developers, to significantly differentiate those subjects with a high degree of mechanical interest and experience from subjects with a low degree of mechanical interest and experience. The test has been chiefly used for selection of personnel for mechanical occupations for the Army, Navy, and industrial organizations.

TABLE VIII

MECHANICAL MOVEMENTS TEST SCORE

| Score | Number | Percent |
|---|---|---|
| Not given | 1 | 1.1 |
| 20-29 Very low | 6 | 6.7 |
| 30-39 Low | 27 | 30.3 |
| 40-60 Average | 55 | 61.8 |

The MDT trainees scored higher in mechanical movements than in intuitive mechanics. Their average standard score as compared with the total norms group was average for the mechanical movements and low average for the intuitive mechanics. This difference in average score was due perhaps to the trainees' imperfect understanding of the concept of "stability." They were required in the latter test to check either the word "stable" or "unstable."

Flags: A Test of Space Thinking. This test is concerned with visual orientation in space. At least two of the primary mental abilities are concerned with visual orientation in space. Thurstone identified these, according to the test manual, as first and second space factors. Space thinking is a measure of the "first space factor" while the Intuitive Mechanics and Mechanical Movement Tests measure the second space factor. The first space factor was defined by the test author as the ability to visualize a rigid configuration when it is moved into different positions. A rigid configuration is one with no internal movement or change when it is moved into a different position. This factor is one of the five clearly defined factors in Thurstone's mechanical aptitude research, and at least two of the primary mental abilities are concerned with visual orientation in space.

The standard score of 39 placed the average of the trainees as "low" in comparison with the norms. The trainees performed on the average lower than the hourly group, and the standard deviation of the trainees was larger than that of any occupational norms group excepting only the total combined norms.

The trainees appeared to have difficulty with this test which was timed. They were not speed-oriented. Also, the task again involved perceptual ability to discriminate small differences in spatial design when the design was moved into a different position. It appeared that the trainees performed better on the second space factor than on the first space factor tests.

TABLE IX

SPACE THINKING TEST SCORE

| Score | Number | Percent |
|---|---|---|
| Not given | 11 | 12.4 |
| 20-29 Very low | 0 | 0.0 |
| 30-39 Low | 38 | 42.7 |
| 40-60 Average | 40 | 44.9 |

### Intellectual Ability

Revised Beta Examination. During late May 1966, applicants to the MDT training program were administered the Revised Beta Examination and the Gray Oral Reading Test, two instruments which were used in the admissions process along with other criteria.

The Revised Beta Examination was preferred to the Wechsler Adult Intelligence Scale because personnel were not available for individual testing of all applicants in the short period of three days. The Revised Beta measures general mental ability of persons who are relatively illiterate, those who have little formal education, and those who do not speak English. This test required no reading; it was orally administered, the subject being instructed to check or cross out answers.

TABLE X

REVISED BETA IQ SCORE

| Score | Number | Percent |
|---|---|---|
| 90-109 Average | 37 | 41.6 |
| 80-89 Below average | 29 | 32.6 |
| 71-79 Inferior | 14 | 15.7 |
| 70 and Below, defective | 9 | 10.1 |

Gray Oral Reading Test. This test constructed by the late William S. Gray, Professor of Reading Emeritus, University of Chicago was designed to measure growth in one of the several strands of reading. The major functions of the test are: (1) To provide an objective measure of growth in oral reading; (2) To aid in the diagnosis of oral reading difficulties; and (3) To guide placement in reading. The Gray Oral Reading Test was not designed to take the place of silent reading tests but is to be used along with them. It is designed to determine the extent of understanding at the simplest level, rather than to measure comprehension. According to the test manual, the test measures fluency and accuracy of oral reading. The manual recommends that other tests, including silent reading tests, should be used with the Gray Oral Reading Test to diagnose reading improvement needs.

The trainees' reading levels, as established by this test, extended from grades one to twelve, the average reading level was grade 8.06. The standard error of measurement for grade 8, Form A, male was .80. This means that the range of reading levels extended for 68 percent of the subjects from 7.26 to 8.86 grade levels.

Correlations between the Gray Oral Reading weighted scores and selected criteria of intelligence as measured by the Revised Beta Examination and chronological age showed a low positive correlation between reading and intelligence, significant beyond the .01 level. The low positive correlation was due to the fact that the intelligence test used, Revised Beta Examination, was not verbally-loaded. Thus this intelligence test was not expected to have a high degree of relation to an instrument designed to measure language facility.

TABLE XI

GRAY ORAL READING ENTRANCE SCORE

| Score | Number | Percent |
|---|---|---|
| Below 2.0 | 1 | 1.1 |
| 2.0-3.9 | 6 | 6.7 |
| 4.0-5.9 | 29 | 32.6 |
| 6.0-7.9 | 15 | 16.9 |
| 8.0-9.9 | 15 | 16.9 |
| 10.0-11.9 | 6 | 6.7 |
| 12.0 and above | 17 | 19.1 |

Non-Verbal Reasoning Test. This untimed test, Corsini Chicago Series, is designed to measure, through the medium of pictorial problems, a person's capacity to think logically. It is alleged to be relatively culture-free, not influenced by facility in languages, fair to people of limited formal education who are not accustomed to taking tests or who are not familiar with paper and pencil tests.

MDT trainees stood at a standard score of 31 as compared with the total norms, descriptively in the "low" range, within the lowest sixteen percent of the norms. The group of laborers with whom the trainees can most appropriately be compared stood within the high average range.

TABLE XII

NON-VERBAL REASONING TEST SCORE

| Score | Number | Percent |
|---|---|---|
| Not given | 2 | 2.2 |
| 20 and Below | 7 | 7.9 |
| 21-27 | 24 | 27.0 |
| 28-34 | 29 | 32.6 |
| 35-41 | 24 | 27.0 |
| 42-48 | 2 | 2.2 |
| 49-55 | 1 | 1.1 |

Verbal Reasoning Test. This timed test (15 minutes) is designed by Corsini and Renck, Chicago series, to measure a person's capacity to reason logically from written material. To some extent, according to the test manual, this capacity is related to language facility and particularly verbal comprehension. The items are 12 problems giving verbal description of activities of four brothers, followed by a three-part question, the answer to which may be deduced from the information given in the description.

The trainees scored higher when compared with the laborers than when compared with the total norms. As compared with the laborers, the trainees were "low average" but compared with the total norms, the trainees were "low" in verbal reasoning. Thus, the trainees were more like the laborers' norms than the total norms.

TABLE XIII

VERBAL REASONING TEST SCORE

| Score | Number | Percent |
|---|---|---|
| Not given | 3 | 3.4 |
| 25-31 | 5 | 5.6 |
| 32-38 | 17 | 19.1 |
| 39-45 | 31 | 34.8 |
| 46-52 | 21 | 23.6 |
| 53-59 | 7 | 7.9 |
| 60-66 | 5 | 5.6 |

The trainees compared more favorably on the Verbal Reasoning Test than on the Non-Verbal Reasoning with respect to the norms. It may be that the non-verbal item was more difficult for the trainees than was the verbal item. However, on both tests, the trainees averaged in the low range of scores as compared to the total norms.

Understanding Communications. This test (Thelma G. Thurstone, Chicago series) is designed to measure comprehension of verbal materials in the form of short sentences and phrases. The main task is one of understanding the whole selection and its implications, even though the test did involve some knowledge of vocabulary. In other words, the task is to solve a problem presented in verbal form. It involves real understanding and reasoning. Speed of reading and vocabulary and word fluency are of minor importance if the subject has good verbal comprehension. The items, 40 in number, consist of one or more sentences which the subject is required to complete by checking the correct word among four choices.

When compared with the unskilled group, the trainees were in the low range of scores (31 standard score), but when compared with the total norms, they were rated as very low.

In summary, in comparison with the total norms, the trainees were lowest in Understanding Communications Test; next highest in Non-Verbal Reasoning, and highest in Verbal Reasoning with standard scores of 27, 31, and 39 respectively. Thus, it may be said that the trainees were significantly better in verbal reasoning than in verbal comprehension. They were not significantly different in verbal reasoning and non-verbal reasoning; however, they were better on the former test. For the trainees, the Understanding Communication Test became less of a comprehension test and more of a test of speed, vocabulary, and word fluency. It appeared that the Verbal Reasoning Test and Non-Verbal Reasoning Tests were purer and less contaminated. An explanation for the comparative performance on the two reasoning tests may lie in the trainees' greater familiarity with the verbal than with the non-verbal type of item.

TABLE XIV

UNDERSTANDING COMMUNICATIONS TEST SCORE

| Score | Number | Percent |
|---|---|---|
| 24-29 | 33 | 37.1 |
| 30-35 | 31 | 34.8 |
| 36-41 | 14 | 15.7 |
| 42-47 | 9 | 10.1 |
| 48-53 | 1 | 1.1 |
| 54-59 | 1 | 1.1 |

Word Fluency Test. Word fluency as opposed to speed of talking is differentiated by the authors of the test manual as the state of "never being at a loss for words." The typical salesman may have a limited education and great fluency while a professor of English may have a broader and deeper vocabulary but not the ability to make easy conversation.

The MDT trainees with a standard score of 27 ranked "very low" in the lowest two percent in comparison with the total norms on the Word Fluency Test.

TABLE XV

WORD FLUENCY TEST SCORE

| Score | Number | Percent |
|---|---|---|
| Not given | 10 | 11.2 |
| Below 20 | 28 | 31.5 |
| 20-27 | 21 | 23.6 |
| 28-35 | 22 | 24.7 |
| 36-43 | 6 | 6.7 |
| 44-51 | 2 | 2.2 |

## Perceptual Abilities

Closure Flexibility Test. The test is designed to establish a profile of scores on various basic mental abilities. The mental ability it measures is defined by L. L. Thurstone as the ability to hold a configuration (diagram drawing or figure) which is "hidden" or embedded in a larger, more complex drawing, design or figure. The test, a ten-minute timed test, is also designed to measure temperament to some extent, and to show potential for differentiating among occupational groups in industry. Therefore, it can be used (1) to study the nature of perceptual abilities as a kind of mental functioning, (2) to study temperament, and (3) to differentiate among occupational groups in industry.

Thurstone, in a study of mechanical aptitude, found a correlation of .63 between reasoning (inductive) and flexibility of closure factor. Other authors have found the flexibility of closure factor to have a well-defined relationship with an analytic reasoning factor.

The mean score of the trainees on the Closure Flexibility Test was lower than those of all occupational groups listed. The trainees were more homogeneous than any of the occupational norms groups.

## TABLE XVI

## CLOSURE FLEXIBILITY TEST SCORE

| Score | Number | Percent |
|---|---|---|
| Not given | 4 | 4.5 |
| Below 23 | 1 | 1.1 |
| 23-28 | 8 | 9.0 |
| 29-34 | 43 | 48.3 |
| 35-40 | 26 | 29.2 |
| 41-46 | 4 | 4.5 |
| 47-52 | 3 | 3.4 |

Closure Speed Test. This test, a companion of the Closure Flexibility Test, is a measure of the "first" closure factor, defined as the ability to perceive an apparently disorganized or unrelated group of parts as a meaningful whole. In the Closure Flexibility Test, the task was to locate the embedded figure or design; whereas, the task in this test is to make a pattern out of disorganized parts or ambiguous patterns. The Closure Flexibility Test measured the "second" closure factor.

The speed of closure factor which this test is designed to measure has been found related to mechanical aptitude (Thurstone) and to reasoning (Botzum); to temperament and mental abilities (Pemberton). Pemberton reported the following temperament pattern for those who scored above the median on the Closure Speed Test:

1. Socially outgoing
2. Confident and impulsive
3. Not logical or theoretical
4. Possessing strong artistic interests

The distribution of scores of the trainees tended toward a heavier concentration in the lower end of the distribution with a standard deviation a bit higher than what one would expect in a normal distribution.

TABLE XVII

CLOSURE SPEED TEST SCORE

| Score | Number | Percent |
|---|---|---|
| Not given | 4 | 4.5 |
| 18-23 | 6 | 6.7 |
| 24-29 | 19 | 21.3 |
| 30-35 | 19 | 21.3 |
| 36-41 | 20 | 22.5 |
| 42-47 | 10 | 11.2 |
| 48-53 | 9 | 10.1 |
| 54-59 | 2 | 2.2 |

Perceptual Speed (Identical Forms). This test, developed by Thurstone and Jeffrey, is considered one of the primary mental abilities in visual thinking. The test manual describes the ability measured by this test as the ability to compare visual configurations (diagrams; drawings; figures) and to identify two figures as similar or identical. This test (sometimes called Identical Forms) is a measure of perceptual speed, not a measure of the ability to form gestalts (Closure Speed) or the ability to identify patterns in a disorganized context (Closure Flexibility). It seemingly has no relationship to thinking or to sharpness of eyesight.

The trainees' average standard score placed them in the "low" category as compared with the total combined norms. Their average score was lower than that for any other occupational group listed, even for the hourly group with which the writer usually compared the performance of the trainees since the former are usually the group of skilled, semi-skilled and unskilled workers.

## TABLE XVIII

## PERCEPTUAL SPEED TEST SCORE

| Score | Number | Percent |
|---|---|---|
| Not given | 6 | 6.7 |
| Below 22 | 17 | 19.1 |
| 22-29 | 8 | 9.0 |
| 30-37 | 26 | 29.2 |
| 38-45 | 20 | 22.5 |
| 46-53 | 9 | 10.1 |
| 54-61 | 2 | 2.2 |
| 62-69 | 1 | 1.0 |

### Initial Skills Proficiency

The only proficiency test taken by the trainees prior to actual training was the series of Nichols Proficiency Tests, an experimental test series developed locally by a graduate student in the School of Agriculture, under the supervision of Dr. A. P. Torrence, who served as the student's chief faculty advisor.

The descriptive statistics of the Nichols Proficiency Test of the trainees were arranged by trade areas in which they were trained.

Because of the total possible score on this test varied by the trade area, no comparisons should be made among the occupational groups.

To further validate this test, it will be profitable to compare the performance of tradesmen in general with those of trainees in bricklaying, carpentry, and meat cutting and with successfully-employed workers in each field. It would be expected that if the test is measuring technical proficiency in these fields, the scores will significantly increase from trainee groups through successfully-employed workers in each field. Trainees were given this test at entrance and again at termination of their training with 68.5 percent of trainees making unsatisfactory initial scores. The tradesmen-in-general group could be used as a criterion group (exclusive of the occupations used in the Nichols Test) since it would be expected that the tradesmen-in-general would not perform as well on these occupational scales as the occupational groups concerned.

## Personality and Adjustment

During orientation and soon thereafter, the trainees were administered several tests designed to give insight into their adjustment and personality.

The Rotter Incomplete Sentences Blank. Considered a projective test, the Rotter Blank can be scored normatively and clinically. The psychologist chose to use the normative method where scores can run from 0 to 240 in the direction of maladjustment.

The test manual indicates that items on an incomplete sentence blank are not equivalent; therefore, the odd-even technique for determining reliability is not applicable, and would tend to give a minimum estimate of internal consistency. The items on the ISB were divided into halves deemed as nearly equivalent as possible. This yielded a corrected split-half reliability of .84 when based on the records of 124 male college students, and .83 when based on 71 female students.

The scoring plan involves judgments and matching of sentences against criterion sentences, so the reliability of scoring is an important factor.

In Table XVI, one sees the distribution of total scores on the Rotter Blank for the male trainees with a range of 76 scores. The standard deviation of 16.22 is more than one-sixth of the range (60-136). The rule of thumb runs that in a normal distribution, the standard deviation is about one-sixth of the range. The range for the female trainees is 50 scores (Table XVII).

It can also be observed from these two tables that in addition to the male trainees being more variable in their scores then the female trainees, the males were on the average less maladjusted than the

the females according to the interpretation of their test scores.

## TABLE XIX

## ROTTER INCOMPLETE SENTENCES BLANK

Adjustment Score Distribution
Adult Form
Male MDT Trainees - Tuskegee Institute

| Interval | Frequency |
|---|---|
| 132 - 139 | 2 |
| 124 - 131 | 1 |
| 116 - 123 | 11 |
| 108 - 115 | 7 |
| 100 - 107 | 11 |
| 92 - 99 | 15 |
| 84 - 91 | 13 |
| 76 - 83 | 9 |
| 68 - 75 | 3 |
| 60 - 67 | 2 |
| Total | 74 |

| | |
|---|---|
| Mean | 98.09 |
| Standard Deviation | 16.22 |
| Range | 60-136 |

## TABLE XX

## ROTTER INCOMPLETE SENTENCES BLANK

Adjustment Score Distribution
Adult Form
Female MDT Trainees - Tuskegee Institute

| Interval | | Frequency |
|---|---|---|
| 131 - 135 | | 1 |
| 126 - 130 | | 2 |
| 121 - 125 | | 1 |
| 116 - 120 | | 1 |
| 111 - 115 | | 1 |
| 106 - 110 | | 3 |
| 101 - 105 | | 1 |
| 96 - 100 | | 1 |
| 91 - 95 | | 2 |
| 86 - 90 | | 1 |
| 81 - 85 | | 1 |
| Total | | 15 |
| Mean | 108.33 | |
| Median | 108.00 | |
| Standard Deviation | 15.00 | |
| Range | 81-131 | |

The normative groups with which the trainees were compared were college students. The manual indicates that though the test was not formally standardized on general adults the changed items for the adult form and scoring principles make it reasonable. The trainees were on the average less maladjusted than the average college subjects and our trainees were more variable in their adjustment scores than the college norms.

Further comparison with normative groups showed that the trainees' average total adjustment scores were lower than those of the validation groups. This finding was interpreted to mean that the trainees may be considered "adjusted" as defined by the Rotter Incomplete Sentences Blank.

Mooney Problem Check Lists. This test, the Adult Form, 1950 Revision, was administered by trainee number rather than by name so that confidentiality might be guarded. The score on this test is the number of problems which the subject has checked as a matter of concern to him.

The test is so constructed that some categories contain more questions than do other categories. Therefore, the mean number of problems in each category must be considered in light of the total possible problems included in the test:

| | | |
|---|---|---|
| 1. | Health | 36 items |
| 2. | Economic Security | 36 items |

| | | |
|---|---|---|
| 3. | Self Improvement | 36 items |
| 4. | Personality | 72 items |
| 5. | Home and Family | 36 items |
| 6. | Courtship | 18 items |
| 7. | Sex | 18 items |
| 8. | Religion | 18 items |
| 9. | Occupation | 18 items |
| | Total | 288 |

The category presenting the largest number of problems is "Economic Security;" the next largest number of problems is "Self Improvement," and the third largest, "Personality," even though the category of "Personality" has twice as many questions as "Economic Security" and "Self Improvement."

The question of why the trainees appeared to perceive more problems in the category of "Economic Security" than in "Occupation" may be answered in two ways: (1) the "Occupation" category has half as many items as "Economic Security" and (2) the questions in the "Occupations" category seem for the most part to be concerned with on-the-job problems. These trainees were all unemployed as a prerequisite for admission to the training program.

*Job Interview Anxiety Inventory*. This test was taken from Sheppard and Belitsky, *The Job Hunt: Job-Seeking Behavior of Unemployed Workers in a Local Economy*. John Hopkins Press, Baltimore, Maryland, 1966. The test consisted of eight questions with scoring of 1, very low degree of anxiety, and 4 very high degree of anxiety, thus giving a possible scale extending from 8 to 32. A mean of 17.49 for the MDT trainees was considered low as compared with the norms; the variability of scores showed a normal distribution since the standard deviation was around one-sixth of the range.

Job interview anxiety, according to the authors referred to above, appeared to be related positively to the number of dependents a worker has and negatively related to age. If older workers have anxiety, they have been found to also be unsuccessful in finding new jobs. Further, the authors continue, job interview anxiety is related positively to the number of dependents a male worker has and the uncertainty of his employment status; the worker with a large number of dependents has an even higher degree of such anxiety. The younger the worker, the greater are his anxieties.

It would be profitable to correlate these Job Interview Anxiety scores with chronological age of the trainees and with number of dependents to determine if age is negatively related to job interview anxiety and if number of dependents is positively related. The norms were white males. Do Negro male and female trainees behave in the same way; i.e., are chronological age and number of dependents related to job anxiety within this group? Is sex a factor in this relationship?

The psychologist's hypothesis is that for the female trainees, the average Job Interview Anxiety score was higher than for the male trainees; that the number of dependents was not as crucial with our trainees as with the norms.

Emo Questionnaire. If the total diagnostics score is less than 8, the test manual states, the score is regarded as an unfavorable sign since lack of response to the questionnaire indicates the subject is apt to have any of the following characteristics: lacks understanding of himself; is overly cautious about giving information about himself; leans over backward to protect himself; or experiences the questionnaire as a threat and freezes up. The total diagnostics score for the MDT trainees was 34.26, well above the critical score of 8.

Personal History Index. The Personal History Index was included in the test battery given the trainees during their orientation period and/or soon thereafter. The test manual gives the purpose of the Index as assisting in predicting future job success on the basis of past performance and experience. An evaluation of the past performance and experience is made by an analysis of the scores obtained on eight performance factors. These factors of content items were identified through a series of factorial studies done by the authors of the Index.

The factors of the Index are defined by the authors in the following way:

Factor 1. School Achievement (SA) - A general liking for and adjustment to the school environment.

Factor 2. Higher Educational Achievement (H) - Special or technical accomplishment and qualifications resulting in a relatively late vocational start and late assumption of family responsibilities.

Factor 3. Drive (D) - Inner drive to be outstanding in performance; to attain high goals even in face of setbacks; to achieve success and advancement.

Factor 4. Leadership and Group Participation (L) - A desire to establish contact with others as shown by membership and interpersonal activity in organizations and an interest in influencing others through community and social activities. A high score suggests active participation and possible leadership in personal contact situations of various types.

Factor 5. Financial Responsibility (F) - Ability to manage a personal economy of defined proportions--to earn, invest, save and accumulate. The assumption is that a person who cannot demonstrate satisfactory financial responsibility in his personal affairs is likely to be less satisfactory in assuming financial responsibility for organizations or for others.

Factor 6. Early Family Responsibility (R) - Early marriage and establishment of a family, with the husband ordinarily the sole provider. Demonstrated achievement in handling the family's financial affairs.

Factor 7. Parental Family Adjustments (A) - Development of realistic and constructive attitudes in the early family environment; including relationships with siblings, parents, between parents and child. The underlying assumption is that if good interpersonal relations were set up in the parental family during the formative period, persons are more likely to achieve satisfactory adjustment as adults.

Factor 8. Stability (S) - Established security and stability in the work situation, resulting from the past history of good performance. Presently, concerned more with the maintenance of what has been achieved than with plans for improvement or development.

Standard Scores of seven age groups and the MDT trainees were compared on the Personal History Index. In "School Achievement," the trainees did not considerably differ from any of the age-groups. They stood at the 45 standard score, which was considered average. In "Higher Educational Achievement," the trainees were significantly lower than any of the age groups. They were considered low in this factor. In "Drive," the trainees were most like the 25-29 year old group and were less like the older groups. In this factor of "Drive," they were considered low average. This finding agreed with the low average rating of the trainees on the occupational aspiration of the Work Interest Index. In "Leadership," the trainees rated average and were not significantly different from any of the age groups. In "Financial Responsibility," the trainees were significantly lower than all age groups except the 20-24 year olds and the 25-29 year olds; in other words, the younger groups. They were considered low in "Financial Responsibility"; in other words, their growth in financial responsibility was considered retarded. In "Early Family Responsibility," the trainees were more like the younger groups than the older groups; they were significantly lower in this factor than are the older groups. Responsibility for being the sole financial support and demonstrated achievement in handling the financial affairs of the family apparently was also one of the areas of retarded growth of the trainees, who were considered low average in this factor. In "Parental Family Adjustment," the trainees were very much like all age groups with the exception of the youngest group--those from 20-24. In this factor, the trainees were considered average. In "Stability," the trainees are more like the younger groups and became less and less like the older groups as the age of the groups increased.

The Cassel Group Level of Aspiration Test. This test is designed to assess certain gestalt-type aspects of personality rather than isolated or fragmented ones, according to the test manual. The theory behind the test is that all human behavior is goal-directed, either on a conscious or on an unconscious level.

More specifically, the test is designed to "assess the discrepancy between the real world (physical field, or the world as others perceive it) and the world as it is perceived by the individual. Five scores are concerned with varying aspects of the personality related to this phenomenon and provide measures of the irreality dimension rather than the non-existence of it, but implies a degree of absence of acceptable sensory phenomena for the general of self-perceptions in relation to previous performance."

The "Level of Aspiration Quotient" is the chief single score of the test. It is the ratio between aspiration and intelligence. The measure of intelligence used was the Revised Beta Examination.

An LAQ (Level of Aspiration Quotient) of 100 indicates a balance between aspiration and intelligence. An LAQ above 100 indicates greater aspirations than intelligence, but with low irreality dimension. LAQs below 100 indicate low aspirations for the subject's intelligence, but with high irreality dimension. Twenty out of 95 trainees tested had scores above 100.

The MDT trainees compared with the typical norms, with a standard score of 42, at a "low average" rating. The delinquent and in-prison norms have the same standard score (42) as the MDT trainees when compared with the typical norms.

Construct validity evidence on the LAQ as reported in the test manual tends to assist in the understanding of what the LAQ is measuring:

## TABLE XXI

## CORRELATION BETWEEN SELECTED CHARACTERISTICS AND LEVEL OF ASPIRATION QUOTIENT

| Test | Level of Aspiration Quotient |
|---|---|
| Intelligence | -.482 |
| Chronological Age | .376 |
| School Achievement | .350 |
| PRA Test of Insight in Human Relations Cooperation | .077 |
| Competition and Aggression | .279 |

(r's of .128 + above are significant at .01 level.)

Based on typical high school juniors and seniors with 200 males and 200 females, these data report that the "Level of Aspiration Quotient" (LAQ) is negatively correlated with intelligence (-.482), positively related to chronological age and positively related to school achievement. With respect to human relations data, the LAQ is more related to the aggressive and competitive spirit than to the cooperative attitude.

If interpretations are correct, an imbalance could be expected in this ratio of aspirations to intelligence among the trainees, who through psychological literature on the culturally disadvantaged have been described as cooperative rather than competitive in their interpersonal relations, poor in school achievement, and lower on the average in intellectual level.

*The Tomkins-Horn Picture Arrangement Test.* This test was devised at the Harvard Psychological Clinic in 1942 by Silvan Tomkins, former professor of psychology, Princeton University, and Daniel Horn now of the American Cancer Society. It was inspired by the *Thematic Apperception Test* authored by Henry Murray of Harvard University. The particular technic was suggested by the "Picture Arrangement" sub-test of the *Wechsler-Bellevue Intelligence Test.*

The test is so constructed that the unusual response can be extracted with logic of test interpretation resting upon the response that is "rare" or improbable when one compares one person with others.

The test consists of twenty-five plates each containing line drawings of three different but related situations with the same "hero" depicted in all three situations within each plate and in all twenty-five plates. The subject was asked to indicate the order of the pictures which made the most sense to him. He was asked to indicate his ordering of the pictures by the use of three symbols ( △□○ ) which appeared at the bottom of each picture. He was also required to write a sentence on each of the three bottom lines of each page explaining briefly what was going on in each situation. The three drawings were shown at angles of 120 degrees so that one drawing was always upside down and it was necessary for the subjects to completely inspect all drawings before arranging the symbols.

The three general areas which the authors attempted to sample were: (1) Social orientation such as sociophilia, sociophobia, aggression, dependence, lability and superego; (2) Optimism - Pessimism, such as self-confidence (or lack of it), happy or unhappy mood, hypochondriasis; (3) Level of functioning, such as relative strength of thinking, phantasy, affect and behavior in the economy of the individual.

The trainees were described by the Picture Arrangement Test in terms of their "rare" response as dependent, sociophiliac and labile in work situations. Their general level of energy for work was low, passive and inactive. Work for them was not a central process but a peripheral one. For them to work, they must be constantly instructed, praised and encouraged so that they may not become distracted by their high general fantasy life and sociophilia needs. Social facilitation seems a necessary condition for beginning work. However, work was not very well sustained. Interruption can be counteracted but passivity cannot. They seemed to have a preference for mechanisms of escape from work--injury, daydreaming, idling, leaning against equipment, etc.

The trainees appeared to have expectations of negative or moderate outcome regardless of the input of effort, low general self-confidence, expectations of sudden change in their social and non-social environment with an attitude that very little in their lives can really be "counted on."

The trainees appeared to prefer the company of men to that of women more than did the women (nurse aides) prefer the company of women to men. They appeared from shy, to passionate, to guilty toward the opposite sex, with expectations of sudden shifts in affective status and thus they showed a tendency to avoid physical contact with the opposite sex.

A high general pessimism with unhappy ending and a general social restlessness also seemed to describe them.

## Summary

Effort will not be made here to bring the foregoing measures of input characteristics into any kind of pattern. Group description made possible by the testing program is not as significant as individual profiles which are to be used in relation to performance in training and on the job. However, summarizing statements about the trainees as a group will suggest the range of expectations.

### Occupational Interest

All of the interests oftrainees as measured by the Work Interest

Index fell within the average and above average categories. They had many professed interests without focus or concentration. The question about the value of the test as an indicator may be suggested by the failure of the trainees as a group to fit the profile of any occupational group for which reported performance on to the test was available.

On the Minnesota Vocational Interest Inventory, the trainees showed lowest interest in mechanical occupations, preferred indoor to outdoor occupations, white collar over blue collar occupations, and "clean hands" to "dirty hands" pursuits.

## Aptitudes

The counseling psychologists raises doubt about the trainees' understanding the concept "stability" that is essential to reliable performance on the test. The MDT trainees' rating higher on the Mechanical Movements Test than on the Intuitive Mechanics Test was of questionable significance.

## Intellectual Ability

The Revised Beta Examination that provided the IQ scores of trainees described none as being above average, 26 percent as inferior or defective, and 74 percent to be average or below average.

Since professed school grade completed is a worthless measure of educational experience, the Gray Oral Reading Test was used to indicate the educational grade level of trainees--8 percent were below the fourth grade; 49 percent between fourth and eighth grade; 24 percent between eighth, and twelfth grade or above.

On a non-verbal reasoning, and on a verbal reasoning test, the trainees' average was in the low range.

On the Word Fluency Test, the MDT trainees ranked "very low" in the lowest two percent with total norms for the test.

### Perceptual Abilities

Three tests which are designed to measure various mental abilities were used.

The Closure Flexibility Test, for which claims are made that it measures mental functioning, temperament, and analytic reasoning, showed the group of trainees to test lower than all occupational groups reported on and to be more homogeneous than any of the occupational norm groups.

The Closure Speed Test has been claimed to show relationship to mechanical aptitude, reasoning, temperament and mental abilities. The MDT trainees' scores were heavily concentrated at the lower end of the distribution.

Perceptual Speed Test. The trainees' average standard score placed them in the "low" category in terms of the combined norms.

### Initials Skills Proficiency

This test showed 68 percent of the trainees to be lacking in rudimentary knowledge about the skill for which they enrolled to train.

### Personality and Adjustment

The Rotter Incomplete Sentences Blank showed the trainees to "adjusted."

Mooney Problem Check Lists. The category presenting the largest number of problems for the trainees was "Economic Security," with "Self-Improvement" second, and "Personality" problems third.

Job Interview Anxiety Inventory. The MDT trainees were rated as having a "low" degree of anxiety on the test.

Emo Questionnaire. While the authors of the questionnaire make it clear that personality diagnosis, screening, and placement should not be based on the Emo Questionnaire alone, the total score of the MDT trainees was well above the critical score for unfavorable characteristics such as lack of self-understanding, excessive caution. high degree of self-protectiveness, and perception of the questionnaire as a threat.

Cassel Group Level of Aspiration Test. MDT trainees predominately had scores indicating low aspiration of the trainees' intelligence with a high irreality dimension.

The Personal History Index was used in sociological identification rather than psychological assessment.

Tomkins-Horn Picture Arrangement Test. Work appeared to be peripheral rather than a central process. The attitude that very little in their lives can be counted, related positively to their expectations of negative or moderate outcome regardless of input of effort.

# PART 3

## HOW

CHAPTER III. Basic Education
CHAPTER IV. Technical Skill Training
CHAPTER V. Counseling
CHAPTER VI. Community Involvement Experiment

# CHAPTER III

## BASIC EDUCATION

It has been determined that in order for an individual to be effectively productive, and perform at a maximal level in all spheres of the modern American society, he must have a solid foundation in the communicative and computative skills. This is the premise on which the previous E and D programs (1964-1965) at Tuskegee Institute offered instruction in the basic skills, and it is the one on which these offerings were based in the 1966-1967 project. This chapter will be concerned with the highlights of the basic education program as an integral part of the preparation of disadvantaged individuals for participation in the world of work.

### Homogeneous Grouping

In order to facilitate their teaching and counseling, the male trainees were divided into homogeneous groups according to reading levels at the outset of the program. There were 31 in brickmasonry, 30 in carpentry, and 30 in meat processing. These groups (sections) were designated by the letter "A" and "AA." The "A" groups were comprised of the more advanced trainees, i. e., their reading levels ranged from grade 7 through 12, and the "AA" groups were composed of trainees whose reading levels ranged from grade 1 through 6.

During the first six months of operation, the nurse aide group, which was not divided, was composed of individuals who read at levels ranging from grade 6 through 12. The second group, who began training in December 1966, had reading levels of 5. 6 through 9. 5.

## Allocation of Hours to Instruction and Other Activities

With the exception of the nurse aides, all groups received 15 hours per week of instruction in their respective technical skills. The nurse aides received 10 hours per week of technical skill instruction. In all groups, 15 hours per week were devoted to basic education (communication skills and arithmetic), five to counseling, and five to activities related to basic education and cultural enrichment.

## Coordination of Instruction

The basic education program was planned so that it was coordinated directly with instruction in the technical skills area. Because of the close coordination, the technical skill development was reinforced through reading, vocabulary usage, and mathematics. As the technical skills teachers developed a concept and its practical application, the basic education teachers undergirded this concept with reading and mathematical applications.

On Friday of each week, each technical skills instructor submitted a weekly instructional plan to the technical skills coordinator for the ensuing week. These were in turn reviewed by the basic education instructors, who developed their plans around the material to be covered. Special attention was given to word concepts and mathematical principles to be applied to the technical material.

On Monday of each week, the basic skills teacher submitted their weekly plans to the basic skills coordinator, who reviewed them to see that the coordination desired had been effected. The success of this technique was enhanced through informal conferences among the instructors in the respective areas, and through meetings of instructional and supervisory personnel. Another means by which coordination was brought about was through the trainees, who often brought problems from the technical areas to the basic education classes for solution.

## Instruction in Communication Skills

Oral and written communication is essential to the effective performance of people in every phase of creative endeavor. The Tuskegee E and D project put forth considerable effort to augment and enrich the communicative skills of the trainees enrolled in the program. The general objectives of the instruction in communication were to:

1. Develop the ability to express ideas effectively and correctly in daily communication.

2. Increase word power through study of homonyms, synonyms, antonyms, dictionary and crossword puzzles.

3. Increase vocabulary by learning special words to use in referring to groups of people, animals and things.

4. Develop an understanding of technical skill terms.

5. Improve reading comprehension, hence enjoyment of everyday reading materials, and improve ability to impart items of interest to class, family, and patients (nurse aides).

6. Improve ability to read and follow directions especially in technical skills areas and in taking tests.

7. Promote the pride and poise that come with self-confidence and belief in one's ability to increase his knowledge and skills.

8. Develop ability to distinguish between fact and opinion.

Because of the fact that the spoken word is used more often than the written, emphasis was put on correct speech and proper enunciation as aids to correct spelling, effective writing, and reading comprehension. In an effort to effect a change from the poor speech patterns that some of the trainees used such as "peoples," "mens," "hope me or hep me," etc., to more acceptable speech, a penalty-bonus game was used in some classes. One point was taken away from the grade for the day if the trainee erred. Two points were given to the first one who "caught" the error and corrected it. The men listened more attentively to one another and good-naturedly "caught" the errors. Great pride developed in those who spoke without errors.

To prove that all correct English is not stilted, slang and conversational expressions which are permissible in an informal style of communicating were included. "Out of Control," a television play (Vanguard), is a good example of this less formal but correct speech. The fact that one speaks differently in different situations was established. One would speak formally for an interview or before an audience. Acceptable carelessness may creep in when speaking to the spouse, or close friend, but correctness need never be sacrificed.

Each day, a short period of the hour was devoted to either written or oral exercises on the agreement of subject and verb. Writing skills in this area improved greatly; however, there was the tendency to lapse back into old habits when speaking. This was partially due to failure to enunciate word endings clearly. As one trainee wrote, "I am trying to use correct English, but some time it is kind of hard when you have been talking wrong for so long."

As an aid for correction of speech habits, poems such as "Casey At the Bat" and "House by the Side of the Road" (Vanguard) were read using exaggerated enunciation. The tape recorder was used to record the performances. It was used also to record casual conversation. The replays, which the trainees listened to with pride, showed a carry-over of enunciating endings.

News For You, the weekly newspaper for adults who need help in reading, provided excellent opportunities for practice in oral expression. Each person volunteered for the article on which he wished to report. He presented it to the class in his own manner. The topics were current and provided an opportunity to use maps, encyclopedia, newspapers and history books. Some topics discussed were:

1. President Johnson's Asian Trip - The speaker for the day (a trainee) used a world map to trace the travel route; time differences, as well as spelling of places visited were noted.

2. United Nations Reconvening - The World Book provided material on background of the United Nations.

3. Eighty-Ninth Congress Ends Session - The make-up of Congress, term of office for senators and for representatives, branches of the Federal Government, and the current election (November 6, 1966) were mentioned.

4. The Tribal War in Nigeria - The three major tribes were discussed; the location of Nigeria in relation to other countries in Africa.

5. "Spotlight on A Hero" was featured in each issue. Often a Negro was presented; this helped to strengthen the trainees' self-image.

## Reading

Specific weaknesses of individual trainees were diagnosed through the Iowa Tests of Basic Skills, which were administered at the beginning of the program. Profile sheets were made on each individual to determine his status. Class record sheets were also developed and studied to determine the areas in which most weaknesses existed.

Guided by the results of the test, the trainees who had major deficiencies, were given intensive instruction during an "individualized instruction" period, which was held for one hour, three times a week. The trainees who were found to have poor reading ability were given special instruction in beginning reading, and in vocabulary building.

TABLE XXII

VOCABULARY AS MEASURED BY IOWA TEST OF BASIC SKILLS FOR GROUP AA TRAINEES AT BEGINNING OF PROGRAM

| Vocabulary Grade Level | Number of Trainees | Percent of Trainees |
|---|---|---|
| 6 | 6 | 17.1 |
| 5 | 5 | 14.3 |
| 4 | 13 | 37.2 |
| 3 | 8 | 22.8 |
| 2 | 2 | 5.7 |
| 1 | 1 | 2.9 |

The Family Phonics System of Reading[1] was useful in helping this special group. This method of individualized instruction helped to narrow the gap between the slow readers and the others in their classes.

Oral reading helped trainees who had difficulty in "attacking" new words, and skipped over them if they were reading silently. They learned to sound out new words phonetically or by syllables. Learning to extract the new word from context and structure also proved helpful. Immediate use of the dictionary for meaning gradually became a habit.

For the carpenters, Chapter V in Fundamentals of Carpentry[2] provided the opportunity to teach compound words such as hardwood and softwood as well as adjectives and subject-verb agreement.

In meat processing, meat terms and their application to material in the textbook, The Meat We Eat[3] clarified some technical skill problems. Vocabulary and word building with emphasis on word roots, prefixes and suffixes helped trainees become independent in the use of source material for their technical skills. Examples of prepositions, conjunctions and interjections were found in the textbook and became more meaningful to the trainees. Getting the main idea and noting details were taught through the article, "The First Roast Pig." Interest in this story was high, and much progress relative to the abilities of the trainees to comprehend the material they read was noted.

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[1] R. Lee Henney, The Family Phonics System (Indianapolis: Board of Fundamental Education, 1964).

[2] Walter E. Durbahn, Fundamentals of Carpentry: Tools, Materials, Practice (Chicago: American Technical Society, 1964).

[3] P. Thomas Ziegler, The Meat We Eat (Danville, Illinois: The Interstate Printers and Publishers, Inc., 1962).

The use of worktexts seemed to be effective in developing basic skills, and in helping individuals with their specific weaknesses. The reading worktext for the "A" groups, Activities For Reading Improvement[4] contained material designed to give practice in four of the major phases of reading development:

1. Comprehension
2. Skimming and following directions
3. Vocabulary and word-building
4. Reading for enjoyment

A pre-test on "skimming and following directions" showed a great need for development of this skill. Many of the trainees were unable to read and follow directions. After completing the unit, however, much improvement was noted in the post-test. The "AA" groups used the worktext How to Read Better,[5] Books I and II. These books guided the learners toward (a) having pleasurable experiences in reading; (b) mastery of reading mechanics, and (c) sharing with others his reading experiences by describing his reactions, inspirations, experiences, and ideas.

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[4] Norman Schacter, and John K. Whelan, Activities for Reading Improvement (Austin, Texas: Steck-Vaughn Company, 1963).

Stores in How to Read Better[6] provided a number of learning situations. In "The Blind Men and the Elephant," differences between opinion and fact were noted. Selecting rhyming words in the stanzas provided a discussion of differences between poetry and prose, rhyming and homonyms.

In the same book, the article, "How They Got Their Names" was useful in providing some American History. Interest in this story led a trainee to bring in an article from Good Housekeeping, "Which State Names Are of European Origin?" from which the class began a study of surnames from World Book Encyclopedia.[7]

A supplementary worktext, My Country,[8] was beneficial in developing reading skills, and in imparting meaningful information about the United States and its government. This book was highly interesting to the trainees, although it had a simplified vocabulary. The material is organized in a manner that each lesson builds upon the preceding one; it incorporates a systematic developmental program of word-attack skills, which leads to independence in attacking new words.

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[5] Harley A. Smith, and Ida Lee King Wilbert, How to Read Better (Austin, Texas: Steck-Vaughn Company, 1964).

[6] Ibid.

[7] World Book Encyclopedia (50th Anniversary Edition, Revised Issue, 1966).

[8] Edwin H. Smith, and Florence Rader Lutz, My Country (Austin, Texas: Steck-Vaughn Company, 1964).

A typical class period in communications included:

1. A film on comprehension
2. Pre-test in comprehension (reading of a short passage with followup questions, correction of papers and analysis of mistakes)
3. Exercise in the worktext to develop better comprehension
4. Word development coordinated with a technical skills area--spelling, writing, defining words
5. Writing sentences or paragraph concerning a lecture or demonstration in a technical skills area
6. Correction for thought, expression, sentence structure, and spelling
7. Rewrite of the corrected form in notebooks

Other activities in the area of communications included dictation exercises, writing of autobiographies, instruction on how to read a newspaper, oral discussions to note difficulties with verbs, study of parts of speech, and improvement in writing.

## Instructions in Mathematical Skills

The use of mathematics in all of the occupational areas offered through the MDT program is essential to the effective performance of duties connected with those occupations. Therefore, as with the communicative aspects of the project, intensive instruction in mathematics was carefully dovetailed with the instruction in the technical skills areas.

Because of the fact that many of the trainees were deficient in mathematics at the outset of the program, it was necessary to spend considerable time in reviewing the basic mathematical operations of addition, subtraction, multiplication, and division. This was done prior to the correlated instruction with the technical skills. After the basics were mastered, however, the desired fusion was effected in all occupational areas. Some examples of how this was achieved in the respective skills follow.

The use of mathematics in brickmasonry, included the estimation of the number of concrete blocks required to construct walls and buildings; estimation of the number of bricks required for walls and buildings; estimation of the amount of concrete required to pour footing for piers and brick walls, and the amount of concrete needed to pour concrete slabs and driveways. Other exercises included methods of finding perimeters and areas of geometric figures, and principles of linear, square, and cubic measurement. Estimation of the amount of materials needed in building to specific measurements was also included as an application of mathematics to the brickmasonry trade.

When the trainees in carpentry were making plans to build a model house, it was necessary to estimate the amount of lumber needed for the girders, sills, floor joists, bridging, rough flooring, and studding. This estimation involved the use of the board foot formula:

$$\frac{\text{No. of Pieces} \times \text{Thickness in Inches} \times \text{Width in Inches} \times \text{Length in Feet}}{12} = \text{BD. FT.}$$

Mathematical exercises in using this formula include addition, multiplication, division, working with fractions and decimals.

It is apparent that such an experience in making this estimate was highly enriching, both from the standpoint of the technical skill and basic education.

In a unit on measurement, the trainees in carpentry were presented measurement tables, and the importance of familiarizing oneself with the procedures in measuring was stressed. The relationship between the different units of measurement was demonstrated on the chalkboard. The foot ruler was used to demonstrate the relationship between inches and a foot, and the yard stick was used to show the relationship between inches, feet and yards. The foot ruler was placed beside the yard stick in an effort to further stress the relationship between the different units of measurement. In addition, a scaled teacher-made mock-up of an inch on a rule was used in giving instruction on how to read the rule.

It was necessary for the trainees in meat processing not only to grasp the fundamental mathematical principles in order to function effectively in the occupation, but also to be proficient enough in arithmetic to pass the examinations administered by personnel managers of retail chain stores to all applicants for such employment with their firms.

Some of the activities in meat processing which were coordinated with mathematics were (1) the study of temperature scales--models of the centigrade and fahrenheit scales were used to teach the trainees how to read them, and the differences between the two; (2) problems involving the procedures used in finding the percentage yield and the value of trimmed meat were explored; (3) the trainees were acquainted with the methods, procedures, and formula for finding the amount of seasoning required for specific quantities of meat.

Interest in the latter activity was high; it was demonstrated how one could determine the amount of seasoning for sausage by using the following formula:

$$\frac{\text{Amount of meat in lbs.}}{25} \times \frac{8}{1} = \text{Amount of seasoning needed in oz.}$$

Many problems of this type were solved by the trainees during the course of a week.

Near the end of the project, six of seven trainees in meat processing who went to Atlanta for job interviews were successful in passing the arithmetic part of the examination which was administered to them. Their scores ranged from 89 to 100. The trainee who failed was successful on a later attempt.

Due to nature of the occupation of nurse aide, and to the shorter period of time that the trainees in this area were enrolled, there was not as much coordination of mathematics with the technical skill as there was in the other occupational areas. This does not mean, however, that the nurse aide trainees did not receive intensive instruction in the fundamental operations of arithmetic. Considerable attention was given to addition, substraction, multiplication, and division (of whole numbers and fractions), decimals, percentage, ratio and proportion, and graphs, and charts. Where feasible, the application of these functions to the occupation of nurse aide was demonstrated and practiced.

## Innovations in Basic Education

Although the majority of the instruction in the basic skills was carried out through traditional methods, several innovative techniques in teaching language and number skills in the various areas were utilized. Unfortunately, these innovations were not utilized until late in the program, thereby making it difficult to measure their effect on learning behavior as compared to traditional methods.

The new techniques utilized were programmed instruction, team teaching, and a game called "Password" (an adaptation of the TV version).

The main emphasis involving these new techniques was on programmed instruction for the trainees in brickmasonry. In preparation for this innovation, Dr. Ralph Martin, Director of the Technical Teaching Center at Knoxville College, Knoxville, Tennessee, was invited to examine the E & D program to determine the feasibility of using programmed materials in basic education. As a result of his finding that the program was fertile ground not only for the use of programmed material, but also for the development of materials heretofore unexplored, the possibility of initiating this technique was explored. There was no programmed material on the market which could specifically fit Tuskegee's program because of the close coordination of technical skill teaching with the basic education teaching.

At a week-end conference which included the basic skills teachers, Dr. Martin and his assistant, Miss Erline Evans, it was decided that an experimental group using programmed materials would be set-up.

The problems were many; there was a lack of equipment--the only materials were two Min/max teaching machines and one tape recorder with plugs for the eight earphones. The latter, Dr. Martin brought with him. But with the enthusiasm and ingeniousness of the teachers involved, enough materials were made and borrowed to get the program underway.

Another handicap was the lack of prepared material. The team from Knoxville supplied the guideline materials. The teachers at Tuskegee who were involved in the experiment, worked day and night to prepare tapes, type stencils, coordinate materials, and test for their effectiveness with the experimental group as well as carry on their duties with the control group not receiving this instruction.

In spite of the problems, however, interesting and purposeful materials were developed and the trainees were highly motivated by, and receptive to the new technique.

The two basic education teachers involved in this experiment reported as follows:

Communication Skills. This type of learning (programmed instruction) seems to be successful because of these factors: a new king of motivation; a chance for the trainees to check their own work; and the idea that they are engaged in "something special."

The preparation of taped and mimeographed lesson was exacting and time consuming, and for the most part, had to be accomplished after the normal working day because there was no quiet place where one could record uninterruptedly. The continuous moving of "laboratory" materials between the classroom and the office was a great inconvenience.

Because the head sets were inadequate in number (only eight), it was necessary to have the entire class to listen, respond, read the answer, and correct the written follow-up lesson.

It was necessary for the teacher to make additional explanations at times, but she attempted to stay in the background and replay the tape for clarification of the point of discussion.

The instructor in communication skills reported that although it is unrealistic to draw definite conclusions about the effectiveness of programmed instruction, it can be said that the percentage of class participation was increased, and some noticeable improvement was made in diction since the men wanted to sound well on tape. Each trainee had the opportunity to hear himself.

There were a few who did not like to use the earphones, claiming that they got headaches and electrical shocks, but each person experienced using them.

Of the trainees who passed the GED, the three in brickmasonry were taught by programmed instruction, and the three in carpentry were taught in the traditional manner. Because of the very small sample, in this instance it is difficult, if not impossible to determine if one method is superior to the other.

Ideally, there should have been more equipment, and an instant "speak and listen" device included to increase the effectiveness of the machines.

## Programmed Instruction in Mathematics

The mathematics instructor reported that the two brickmasonry groups, "A" and "AA", were taught fractions and decimals by using programmed materials. The Carpentry "AA" class was taught the same materials with the traditional method of instruction.

Upon completion of the unit, the three groups were given a mastery test to determine the amount of progress. The test revealed the following: Of 32 problems, the Brickmasonry "AA" class solved an average of 19.6 problems, or 61 percent; Brickmasonry "A" solved an average of 21 problems, or 65 percent. Carpentry "AA", taught by the traditional method, solved an average of 19.4 problems, or 60 percent.

In an effort to determine the progress of the groups, the instructor compared Brickmasonry "AA" with Carpentry "AA", since their educational levels were the same. The test revealed a difference of one point in the two groups. This seems to indicate that the effectiveness of both methods was about the same.

However, as a result of observation and study, the instructor believes that the programmed method of instruction is better for adults than the traditional method if used with ample equipment, and over a longer period of time. The effectiveness could then be more reliably evaluated and would probably be outstanding.

## Team Teaching

Another innovation in the teaching methods and techniques was the use of team teaching by the technical skills and basic education teachers of the meat processing trainees.

Because the effectiveness of coordinating technical skills with basic education had proved to be profitable and desirable, a more closely knit coordination through team teaching was the basis for this innovation. It is believed that the interest in, and enthusiasm for training was enhanced through this plan.

The "A" and "AA" groups in meat processing were closely allied in achievement; therefore, instead of the class meeting separately in groups of 16, the entire group of 31 met on occasion, for instruction.

The technical skills teacher set the pace for the group. He gave a lecture at the first morning session to the entire group, including the basic skills teachers. The lessons in English and mathematics for that day grew out of, and tied in with, the lecture for the day. Practical work for the day reflected understanding in all areas.

Individual and group problems were diagnosed and remedied by the teachers as a team. Assignments from the technical skills area gave direction to the basic skills teachers. For example, the meat processing trainees were asked to write 250 words on "The Kind of Meat Cutter I Hope to Be." The English teacher then helped them to organize their thoughts by developing an outline from which sentences and paragraphs were developed. The spelling, handwriting, punctuation, and clearness of expression were necessary parts of the whole. The mathematics teacher helped them to define their computational needs to be a successful meat cutter--ability to read scales, barometers for freeze-dry technique, etc. The fact that the assignment came from the technical skills area, in which there is the greatest interest, helped the trainees see the importance of basic education skills. When problems in one area could be carried to another for help, the relationship between areas was more clearly established, and there was a definition of needs in all areas.

Another written assignment, "My Most Unforgettable Experience at Tuskegee," almost invariably pointed to the experiences in the meat processing class. Through such assignments, much was revealed to the teacher about the student, which might otherwise have gone unnoticed.

Activities involving the team teaching experiment included:

Communication skills. One of the areas in which improvement was needed was in written expression; thus, a great deal of emphasis was placed on writing, which provided an opportunity for the students to apply the skills of sentence structure, punctuation, capitalization, spelling, and outlining.

A letter of appreciation to a meat cutter who demonstrated the method that a particular chain store uses to cut meat was the introduction to letter-writing. Letter-writing, parts of the two types of letters (friendly and business), the arrangement of the parts, and the forms for letter writing, were discussed. Each trainee wrote a letter of application for a job.

Several technical skills assignments provided an excellent opportunity to correlate English with the skill. Two essays, "The Kind of Meat Cutter I Want to Be" (250 words), and "My Most Unforgettable Experience at Tuskegee," provided an opportunity to introduce outlining. The fact that these assignments originated in the technical skill class gave greater meaning to the importance of English.

A typical day utilizing the team teaching technique, and involving the three teachers of the meat processing trainees, is as follows:

The technical skills instructor gave a lecture on the freeze-drying method of preserving meats. On the same day, the English instructor devoted a portion of the class period to the phases that related to English, such as listening comprehension, the meaning of words used, and the spelling of words. The mathematics instructor followed up with teaching the trainees to read a barometer which is used in freeze-drying. This method was stimulating to both trainees and teachers. The trainees appreciated the clearer concepts. Learning was easier for them.

Another innovation developed within the framework of the team teaching technique was a modified game of "Password," which increased the facility in the use of words related to the vocational skill as well as to personal needs and development.

After a lecture by the technical skills instructor, each group or team "A" and "AA", had a representative to guess the word presented by the game leader, who stood behind the two players. One-word clues were given by members of his group after they saw the word held up by the leader. Each word presented, counted 10 points and the points decreased by one after each failure to correctly guess the word. A team had to score 25 points to win the game. Competition between the groups was keen and wholesome. Skill in the use of words were greatly improved from one game to the next.

## Activities Related to Basic Education

As a supplement to the basic education and technical skills training, related activity classes were held for the trainees on a daily basis. The material explored in these classes concerned cultural enrichment, current events, government, history, general science, and personal development.

The general objectives of these activities were:

1. To correlate the training program with everyday affairs.
2. To promote understanding of current events, newspaper and magazine articles, and an awareness that personal interests are often joined to the welfare of others.
3. To stress the importance of, and the responsibility for using the franchise wisely - to stress the importance of considering all evidence before making decisions.
4. Reappraise individual worth in light of new facts as to the role the Negro has played in America's development.
5. To expose trainees to educational movies, and good speakers; to encourage intelligent questions and the participation in courteous debate.
6. To provide activities which will help trainees to participate successfully with others in varied types of activities.

The media through which these activities were presented were lectures, discussions, question and answer sessions, films, experiments, and observations.. During the period of instruction, seven units were conducted successfully:

1. Government
    a. Constitution
    b. Preamble, Amendments, Etc.

- c. Local and State Government
- d. Newspaper and Magazine References

2. Responsible Citizenship
   - a. Citizenship and You (Film)
   - b. The Community (Film)
3. English Literature
   - a. Reports on Lives of Famous Americans
   - b. Life of Mark Twain (Film)
   - c. Life of Charles Dickens (Film)
   - d. Poetry of Langston Hughes
   - e. Poetry, Short Stores, Novels
4. Consumer Education
   - a. Free Economy
   - b. Theory and Practices
   - c. Life Insurance
   - d. Mortgages and Loans
   - e. Planning and Budgeting for Wiser Spending
   - f. Income Tax
5. Music and Art Appreciation
   - a. Life and Music of Marion Anderson
   - b. Life and Works of Leonardo da Vinci
   - c. Recorded Selections of Great Artists
   - d. Discussion of Various Types of Music

6. Science
    a. Molecules of Heredity (Film)
    b. What Makes Clouds (Film)
    c. Air Has Weight (Experiment)
    d. Air Occupies Space (Experiment)
    e. The Air Around Us (Film)
    f. How Electricity is Produced (Film)
    g. Atomic Energy (Film)
7. Geography
    a. Growth of Our Country from 13 Colonies
    b. Louisiana Purchase
    c. Alaska (Film)
    d. Hawaii (Film)
    e. Westward Movement (Film)
    f. Industry in Russia (Film)

Materials used for the scientific experiments included: funnels, milk bottles, balloons, water glasses, 8 x 12 water vessels, yardsticks, Rand suction pumps, cardboard, baby bottles, candles, boiled eggs, glass jars, and matches.

The trainees participated enthusiastically in conducting these experiments. They also studied the weather, how clouds are formed and the names of different formations. They used instruments (thermometer, barometer) to measure temperature and humidity in the air.

The trainees who passed the General Educational Development Test attributed their success in large measure to these related activity classes.

General Educational Development Test of High School Equivalency.

An important by-product of the 1966-1967 MDT Experimental and Demonstration Project at Tuskegee Institute was the receipt of High School Equivalency certificates by 19 of the trainees who passed the General Educational Development Test. As indicated in Table XXIII, 19 of the 45 who took the test passed it.

## TABLE XXIII

## SUMMARY OF PERFORMANCE OF MDT TRAINEES ON THE GENERAL EDUCATIONAL DEVELOPMENT TEST OF HIGH SCHOOL EQUIVALENCY

| Training Area | No. Tested | No. Passed in Group "A" | No. Passed in Group "AA" | Total No. Passed | Percent Awarded Certificates |
|---|---|---|---|---|---|
| Brickmasonry | 10 | 3 | 0 | 3 | 7 |
| Carpentry | 5 | 3 | 0 | 3 | 7 |
| Meat Processing | 13 | 4 | 2 | 6 | 13 |
| Nurse Aides | 16 | 2 | 5 | 7 | 16 |
| TOTALS | 44 | 12 | 7 | 19 | 43 |

This seems to be a tribute to all phases of the program--basic education, counseling, and training in the technical skills, because the efforts expended were coordinated so that one area of activity undergirded the other for the ultimate benefit of the trainees.

# CHAPTER IV

# TRAINING IN TECHNICAL SKILLS

One of the primary goals of the Experimental and Demonstration Project for Rural Workers at Tuskegee Institute (1966-1967) was to prepare disadvantaged adults for gainful employment. Therefore, the technical skill training phase of the project was of utmost importance to the success of the endeavor.

The outstanding features of each of the areas of training--brickmasonry, carpentry, meat processing and nurse aide will be explored separately in this section of the report.

## Brickmasonry

The general goal of the instruction in brickmasonry was to provide training to selected individuals from disadvantaged circumstances so that they could become proficient enough in the skill to enter the job market at the entry level for the occupation.

The specific objectives of the instruction in brickmasonry were:

1. To determine through experimentation the most advantageous techniques to use in training bricklayer(s).
2. To develop on the part of these trainees:
    a. Basic skills, knowledge and personality factors necessary to become a bricklayer at the entry level.

- b. Manipulative skills and the necessary related technical information pertaining to the:
  - (1) use, value, and care of tools and equipment used by the bricklayer.
  - (2) construction of masonry walls, chimneys, partitions, piers, arches, fireplaces and smokestacks.
- c. A new appreciation, understanding and desire to improve the role he plays in his present community or his future place of residence.

3. To familiarize trainees with some of the techniques and materials that have been recently developed by or for the masonry construction industry. Emphasis is given to the use of the common American bond.

4. To create on the part of trainees a new insight and a desire to foster or advocate:
   - a. On and off-the-job personal safety and hygiene practices.
   - b. Sound labor - management relationships.

At the beginning of the program, all trainees in brickmasonry gained basic experiences for the occupation by learning the names of tools, their value, use, and care. Manipulative and related lessons in theory were concerned with reading blueprints, making working drawings, mixing mortar, and laying bricks and concrete blocks to a straight line. As their skills developed, the more advanced trainees were sent out on "live" jobs at the discretion of the instructor. Eventually, all trainees were given the opportunity to gain experience outside the shop.

In order to build self-confidence in the trainees, small groups were formed with one of the trainees serving as a leader. Over a period of time, the position was rotated. This proved to be an effective method because in some cases, the less advanced trainees seemed to learn more rapidly when being assisted by a classmate.

Some of the "live" jobs in brickmasonry have included:

1. Constructing a brick veneer wall along the side of a building on the campus; this job offered valuable training for doing residential and commercial building.
2. Repairing a house that required building concrete block steps, concrete block pillars, brick columns with concrete caps, closing fire places, and pouring and finishing a concrete porch.
3. Laying out and building a structural tile equipment house on the college farm.
4. Working with Peace Corps trainees who were building temporary and permanent structures as part of their training assignments for service in underdeveloped countries.
5. Constructing concrete block walls on the lower floor of the college power plant which was being renovated to house a radiation laboratory.
6. Building a manhole with bricks and concrete blocks.
7. Constructing a seven-room concrete block house; staking it off, setting the batter boards, digging the footing, pouring the concrete footing, and laying the blocks.

8. Building two brick columns 32" x 32" x 8' with concrete caps.

9. Building a concrete block morgue for the John A. Andrew Hospital.

10. Building ornamental panels - basket weave pattern, diagonal basket weave pattern, diagonal common bond diamond pattern unit, herringbone pattern, and cutting miter blocks.

Although the trainees in brickmasonry were exposed to a variety of experiences throughout the training period, near the completion of the program, the instructor returned to the basics of bricklaying. Emphasis was placed on laying bricks to a line, laying concrete blocks to a line, and building corners. Past experiences had taught that these were the types of jobs that the trainees would likely be required to do when placed in a commercial employment situation.

## Carpentry

As in the other technical skills areas, in the early stages of the program the activities in carpentry were focused on orienting the trainees to the various phases of the field, and on developing a sense of pride in the care and use of tools. During this early period, they were also exposed to the basic elements of blueprint reading, making working drawings, and laying out.

The specific objectives of the training program in carpentry were to:

1. Determine through experimentation the most advantageous techniques to use in the training of carpenters.

2. Develop on the part of these trainees:

   a. Basic skills, knowledge and personality factors necessary to become a carpenter at the entry level.

   b. Manipulative skills and the necessary related technical information pertaining to the:

      (1) use, value, and care of tools and equipment used by the carpenter.

      (2) methods and types of framing and finishing employed in house and other frame construction.

   c. A new appreciation, understanding and desire to improve the role he plays in his present community or his future place of residence.

3. Familiarize trainees with some of the recent techniques and materials that have been developed by or for this industry. Emphasis was given to low-cost houses and pre-fabricated wood components.

4. Create on the part of trainees a new practical insight and a desire to foster or advocate:

   a. On and off-the-job personal safety and hygiene rules and regulations.

   b. Sound labor - management relationships.

Efforts were made to locate as many "live" jobs as possible to supplement those through which experiences were gained in the shop. They were found on the campus and in the nearby community. These jobs helped the trainees to learn skills in cutting rafters, sills, leaders, sub-floors, soles, studs, ledgers, bridging, subsills, partition plates, and ridges.

Some of the projects which provided enriching experiences were:

1. Building two types of calf feeders from blueprints.
2. Renovating a farm dwelling in the community.
3. Building forms for the footing, foundation, and slab-at-grade for a building at the Peace Corps training camp. At the same location, a shower had forms set for its enlargement; it was framed and its roof was constructed.
4. Trimming and hanging a door in the Farm Mechanization Building.
5. Setting door frames for masonry walls at the campus cannery and on the Institute's farm.
6. Renovating a section of the campus greenhouse. This work consisted of framing, hanging sheetrock, setting a door jamb, trimming, hanging doors, and taping the sheetrock.
7. Constructing a divider for one of the rooms in the Farm Mechanization Building.
8. Running a planche for a cornice at a trainee's house which was being renovated as a project. This experience exposed the trainees to different parts of the cornice, such as the fascia, frieze, lookout, drip, bed moulding, and crown moulding.
9. Completing construction of a full-size model house on the campus. This involved interior and exterior work with a variety of building materials. This house was prepared for brick veneering.

10. Working cooperatively with the brickmasons in constructing a seven-room house off the campus. This project was nearly completed at the conclusion of training.

Throughout most of the project, the emphasis in skill training had been on accuracy. However, many of the trainees lacked the necessary speed to complete with journeymen carpenters. A shift in emphasis brought satisfying results. It was demonstrated that the majority of the trainees could work rapidly with accuracy. Furthermore, the confidence that the trainees had in themselves was increased considerably.

## Meat Processing

Early in the program, the meat processors exhibited an eagerness to learn the technical skills necessary to become first-rate meat cutters. They showed little interest in the basic education classes. This attitude was soon to change, however, when they discovered that without the basic skills they would be seriously handicapped in occupation for which they were preparing. When they encountered the challenge of reading and following directions for cutting meat, they realized that the learning of English was pertinent to their training. The need for mathematics was clear when the trainees attempted to read scales, thermometers, to keep simple records, and to analyze those records.

The initial experiences for the meat processors included identifying cuts of meat through pictures and handling meat, identification of meat cutting tools and equipment, and their care and use.

The objectives of the program were to:

1. Determine through experimentation the most advantageous techniques to use in training meat processors.
2. Develop on the part of these trainees:
    a. Basic skills, knowledge and personality factors necessary to become a meat cutter at the entry level.
    b. Manipulative skills and the necessary related technical information pertaining to:
        (1) the slaughtering, processing and marketing of meats (beef, lamb, poultry and seafoods).
        (2) the processing of eggs.
        (3) the use, value, and care of tools and equipment used by meat cutters.
    c. A new appreciation, understanding and desire to improve the role he plays in his present community or his future place of residence.
3. Familiarize trainees with some of the techniques and materials that have been recently developed by or for this industry. Emphasis given to health requirements (plant sanitation and personal hygiene).
4. Create on the part of trainees a new insight into, and a desire to foster or advocate sound and acceptable principles of:
    a. Plant management procedures.

        (1) labor - management relationships.
        (2) product flow
        (3) cost - price relationship.

    b. Marketing procedures (quality production) - Products meeting "Selling-Appeal" of the various customers.

    c. Human relations principles.
        (1) personal appearance.
        (2) everyday manners.
        (3) correct language.

The means by which efforts were made to accomplish the above objectives were mainly through lectures, demonstrations, audio-visual media, and practical experiences on the part of the trainees.

In order for them to have a full appreciation of what is involved in the entire procedure of preparing meat for the consumer, the trainees were given experience in slaughtering of stock, dehairing, eviscerating, cutting meat into consumable portions, and wrapping it. Where appropriate, instruction on the seasoning and curing of meats was given.

As a group, the trainees in meat processing were younger, and had attained higher educational levels than those in the other three areas. A higher percentage of them passed the GED test. These qualities were quite necessary because many retail chain stores would not employ a person as a meat cutter unless he had earned a high school diploma or its equivalency. Some personnel managers would not consider a person with the equivalency certificate for employment.

As a result of the thorough training program in meat processing, the follow-up study indicated that many of the graduates were making excellent progress on their respective jobs. A full report on graduates of all areas will be included in Chapter VII.

## Nurse Aide

The training in nurse aide was not as extensive as it was in the other three areas due to the fact that the length of the program was of only six months duration for each of the two section--"A" and "AA". It must be pointed out, however, that this was sufficient training time for this occupation. Although the two groups had different instructors, the instructional patterns followed the same general sequence.

After a period of orientation to the occupation of nurse aides, the trainees were exposed to practical experiences which included the following:

1. Taking the temperature, pulse and respiration.
2. Taking blood pressure.
3. Daily care of the patients.
4. Care of equipment.
5. Making of beds.
6. Emergency care of patients.

The specific objectives of the program were to:

1. Determine, through experimentation, the most advantageous techniques to use in training nurse aides.
2. Prepare the candidate to work in hospitals with patients under supervision.
3. Assist the trainee in understanding the principles underlying nursing care so that she may identify those problems common to patients.
4. Assist the trainee in giving safe patient care through the application and use of these principles.
5. Help the trainee develop the ability to communicate with patients and personnel.

Nurse aide training was a new MDT offering for the project at Tuskegee Institute. Therefore, some problems that were not prevalent in the other areas were encountered in this one. The outstanding difficulty was engagement of an instructor. Due to the limited number of hours allotted for training, an instructor could be employed only on a part-time basis--two hours per day. The first of trainees "A" was fortunate to have had the same vocational instructor throughout the six-month training period. The second group "AA", however, had three different instructors. Understandably, this situation was almost certain to have some adverse effect on the trainees. Regardless of this fact, both groups seemed to have gained a degree of proficiency that has enabled the majority of them to render a high quality of service in employment situations in which they were placed.

# CHAPTER V

# COUNSELING

Experience in the first MDT experimental and demonstration project at Tuskegee Institute indicated the need for special emphasis on counseling. In this project, counseling was given emphasis, and the results as shown in the performance of the trainees, seem to prove the value of intensive counseling, and suggest that an effective training program and successful job adjustment following training may be helped by counseling. A special monograph, The Tuskegee Handbook for Counselors of Disadvantaged Adults, has been published. Our conclusion is "counseling makes a difference." The report on counseling given in the following pages, is crudely descriptive since the monograph is available to persons who may have a special interest in counseling.

## Orientation

The effectiveness of counseling in a program for undereducated and poverty-stricken adults begins with an intensive orientation of teachers and other staff members, with particular attention being given to their strengths and weaknesses. A staff recruited hastily for short-term employment predictably will vary in temperament, philosophy, and type or degree of training. Counselors may safely assume that other members of the staff have no professional training in counseling processes. This understandable assumption grows from the newness of the program, the many and varied activities required to implement it, and the absence of a pool of professional workers to draw upon.

Counselors may make a second assumption, not so safe as the first one, that the staff recruited is composed of conscientious persons. Their academic credentials may meet high standards of teacher qualification, and yet they may find teaching adult trainees a baffling challenge. Their humanitarian sympathies may be entirely sincere, and yet they may find rapport with the trainees elusive. Counselors must anticipate problems the staff will encounter and help them in their efforts to cope.

In the orientation of a project staff, the following concerns must be given attention:

1. A clear understanding of what the program is designed to do.
2. What legislative and administrative provisions describe and specify for its operation.
3. What the particular activity which they will be engaged in undertakes within the confines prescribed in 1 and 2.
4. Precise specification of the several job descriptions.
5. Lines of authority and channels of communication in the project structure.
6. Complementary character of responsibilities and interpersonal relationships necessary for the success of the common cause.

7. Culture, psychological, and educational characteristics of trainees.

When staff members are recruited, they are interviewed; the program is briefly described in general terms and any questions posed by prospective staff members are answered. However, interviews and information do not constitute an orientation. Staff members receive ideas and construct the program as they interpret and amplify what has been told them. It is necessary to outline and present specifications in some detail so that all members of the staff may share the same concept of the program. However painstaking this may be, it is worth the efforts to preclude later deviations and distortions.

However clearly purposes and objectives may be presented, it is desirable to acquaint staff members with the policies established to further the ends of the program. The agency, public or private, that provides funds for a program does so within a framework of policy. In the case of projects financed by a public agency, legislative and administrative guidelines exist which are binding on staff and trainees.

To prepare the members of the faculty and staff for the new program, a two-week orientation program was conducted during the first two weeks of its operation. In the first week's sessions, personnel managers, building contractors, trade union officials, and resource persons from Tuskegee Institute, the Alabama State Department of Vocational Education, and the State Employment Service discussed their observations and offered information about their respective areas. The main purpose was to provide the faculty with new insights into the areas of effective teaching methods, counseling techniques, and basic employment practices. In addition to contributions of resource persons, the total project was outlined to staff members in terms of its objectives, research design, and methods of implementation. Some of the insights provided by local and out-of-town contractors focused on the general needs in working with trainees, to develop a sense of responsibility interests, and self-confidence, and to increase motivation.

In the second phase of the faculty pre-planning activities, lectures by specialists from Tuskegee Institute at large and the MDT staff were incorporated to discuss the following:

1. Principles of Education, Materials, and Diagnostic Instruments
    a. Principles of Teaching Adults
    b. The Use and Operation of Audio-Visual Aids
2. Guidance and Counseling for the Disadvantaged Adult
3. The Research Design

In a general meeting, during this second week of faculty orientation, the personnel discussed each of the following:

1. Job Description
2. Scheduling of Program Activities

3. Attendance Keeping
4. Evaluation Methods and Procedures
5. Outline for Writing Reports
6. Teaching Materials and Interrelated Methods
7. Disciplinary Action (trainees)
8. General Expectation of the Administrative Staff (Director, Assistant Director, Director of Research, General Education Coordinator, Counselor Director, Technical Skills Coordinator)

A specific period during this orientation was devoted to a pre-planning phase involving basic education, vocational education, and counseling procedures with emphasis on the methods and techniques to be used in relating the various trade areas to basic education. Specific time was allotted for individual as well as group planning.

The orientation period provided an opportunity for the program personnel to receive pertinent, factual information and insightful provocative experiences which inspired increased enthusiasm and zeal for the job ahead.

A week of orientation for the trainees began at the end of the orientation for staff with a variety of activities to acquaint trainees with a new and unfamiliar environment.

An educational program for the disadvantaged, or any group for that matter, requires in principle that the orientation of its staff and trainees be explicit, that no person involved enter the program assuming that he "understands what it is about," or glibly stating that "This is what I thought." Too many well-intended efforts have foundered on these two ready and ill-designed assumptions of knowledge and understanding.

## Group Counseling

Basic Considerations. From the intake interview and diagnostic tests, it was considered unlikely that a program of individual counseling could be immediately effective. In the rural and small town communities from which the trainees came, the neighborhood was the world. In such a small world people "know about" a person and what they don't know they don't ask. Asking in such a social situation constitutes both "prying" and a futile exercise. This cultural characteristic was promptly emphasized by the trainees in expressions of resentment against tests and questionnaires, and the frustrating silences and evasive statements left no doubt as to the futility.

There were other deterrents to immediately successful group counseling. For example, it was soon evident that teachers and counselors would have to learn the vernacular of trainees before the trainees would try to communicate with staff. Again, as important to communication as using a common vernacular was the need to guard against the appearance of talking down to trainees. Whatever skills and knowledge the staff might have, trainees were sensitive about any behavior they interpreted as treating them like children or fools. They had an expression for this behavior--"She don't treat you like you grown. She talk to you like you big-size but don't know nothing."

The first challenge to the counseling staff was to answer the unspoken questions the trainees were asking. Their enrollment in the program suggested basic interests and in the initial stages group counseling was addressed to these. Group counseling sessions were planned for both the trainees and the counselor to discuss, explore, learn and exchange ideas pertinent to the trainees' personal, social, and vocational interests. Effort was made to maintain flexibility and to have these sessions serve as a sounding board for group concerns and group problems. Moreover, the sessions were used to answer questions that the trainees wanted answered; they were not limited to just what the counselor wanted them to hear. It was often necessary to alter plans and listen to current concerns of trainees before introducing new ideas and concepts to the group. From past experience, it has been learned that adults are not as receptive to change and new ideas as a less experienced population. They must first recognize a need for change and relate their need to their own particular situation.

Considerable effort was extended to create for the small group session a completely different climate from the structured classroom environment.

Group counseling was devoted to helping trainees learn through interaction with two main general objectives:

1. Assisting the trainees in developing attitudes, habits, standards, and values suitable to life's activities and to occupational success.
2. Aiding trainees in making desirable, thorough and necessary decisions that will facilitate wholesome adjustment in a social world.

Group sessions were semistructured for informal discussions to gather educational, occupational, and personal-social information. Through participation and interaction in the sessions, trainees were able to detect some of their problems and to try to solve them. Group counseling then, provided an explicit kind of learning during the program.

Vocational discussions were related to training in the vocational skills, and trainees provided built-in reinforcements by contributing to the discussions in counseling sessions and in skills classes.

The phase of job study entailed exploration from three facets, seeking the job, getting the job, and holding the job. Each facet was approached in a manner providing for modification according to the needs of the trainees.

It was essential for every trainee to know how to seek jobs. Basically, the beginning was to seek jobs each person knew he could do, seek jobs that each person really wanted to do, and meet requirements for jobs sought.

Procedures to follow in seeking jobs were emphasized. Classified ads, Chamber of Commerce listings, the yellow pages of the telephone directory, placement agencies, friends, and family members were the chief sources of information about jobs. During group practice sessions, the trainees made wide use of classified ads and telephone directories.

Applying for a job in writing was studied at length. Two types of applications were used, the formal application and the personal history or resume. Emphasis was placed upon neatness, completeness, and accuracy of the information as the three characteristics of a good application.

Significant topics in the study of jobs were the appointment and the interview. The group carried out exercises in making appointments by telephone and requesting interviews. The technique of role playing enhanced the trainees' consciousness of good word usage, skilled and pleasing intonation, and clarity of enunciation as important factors in securing jobs.

Counseling sessions stressed the personal interview through role playing which brought in all the foregoing skills. Other factors highlighted as important in selling the self to prospective employers were punctuality, going alone for the interview, good manners, self-confidence, and easy but dignified posture. Trainees became aware of what employers look for in applicants for jobs, what makes a successful employee, and how one's first impression upon an employer can attitudinize the job. Each trainee listened to his tape-recorded practice interviews to learn how to examine weaknesses for himself.

Holding the job was vivified with the trainees by stressing punctuality and respecting rest breaks, coffee breaks, and sick leave. Other factors in holding a job were reflected by group members; these included doing the job well, taking pride in the job, and being courteous at all times.

It was explained to the trainees that some of the reasons people fail to get jobs were negative attitudes, poor appearance, unrealistic wage demands, lack of training, poor reputations, and lack of sincerity on the job.

Reasons for failure to hold jobs were enumerated as poor attitude, inability to perform job, unwillingness to do the job, inability to take criticism, being a "know-all," poor appearance, and inability to get along with fellow employees.

Further study and looking to the future while working were considered worthy of exploration. Ways of doing so were described as working diligently to meet objectives of the employing firm, working cooperatively, reading books, magazines, trade journals, and observing as much as possible. Enrolling in formal training during non-working hours was stressed as a highly acceptable idea.

Trainees were briefed on compensation laws and labor laws at the very end of this unit exploration. Many group activities of role playing, application filling, self-recording, and emphasizing significant occupational, educational, and personal-social information, brought out in each trainee strengths that had been literally unknown and untapped.

Self and the Social Situation. The second general objective of group counseling was to aid and guide the trainees in making desirable and necessary decisions that would facilitate a satisfying adjustment in a social world.

The training experience was recognized as contributing more to the lives of the trainees than the mere acquisition of a new vocational skill. Several likelihoods accompanied the anticipated new job: being accepted as a person, playing a new role in relation to fellow workers and employers, adapting oneself to new neighbors and a strange community. Questions the trainees needed to ask and answer for themselves in this context were: "What behavior, conduct and social skills will be necessary equipment for me?" "What kind of neighbor and citizen must I aspire to be?"

Realizing the necessity for one to be able to get along with others in the world of work and understanding one's self were most important.

The study of "Understanding the Self" was carried out during a period of three and one-half months, beginning in September and ending in December. Each session was one hour per week. The topic was introduced by the counselor's explanation of its significance. Other means of exploring the topic were through group discussions, selected printed material, film and graphic material. Social topics dealt with human relations and relationships on the job.

Self-improvement, or attitudinal change, is a major objective of group counseling. The trainee was exposed to various learning situations and with some he could identify in terms of his own problems. He was encouraged to explore "self" and to learn his likes, dislikes, strengths, weaknesses, needs, desires, interests, abilities, and personalities. Further, he was encouraged to analyze his self-image, feelings toward others, ideals and goals. Much of this was in group counseling as he participated in the various discussions. Such instruments as tests, sociometric studies, and individual counseling indentified much of the information concerning the trainees; yet group counseling provided an excellent opportunity to observe a man or woman in group activity. .

## Techniques and Procedures

The film series, the forum series, small group discussions, and the trainee association were all subsumed under the heading, group counseling. These sessions, although each varied in scope, had common objectives. Group counseling afforded opportunity for the trainees to assemble en masse and to participate in activities as members of the group.

The forum and film series were structured settings in which topics were introduced for group discussion purposes through resource speakers and visual aids. The trainee association, frequently called the student government, remained semi-structured, providing the members with opportunities for group interaction or for the exchange of ideas, to function holistically for the purpose of organizing and operating to achieve common goals.

The forum presented specialists to discuss health or personal hygiene, social skills, civic competence, economics, family relations and philosophy. Group interaction resulted after presentations when questions of a general or specific nature were posed by various members of the trainee body.

The film series, a counterpart to the group counseling sessions, served as an effective means of introducing personal-social problems for discussion. This session provided an opportunity for the trainees, through the use of film, to explore various topics--family relations, character development, financial management, community responsibilities, employment practices, responsibilities of parenthood, human relations and future planning.

To determine the specific information trainees wanted to have, inquiries were made of them and they were invited to ask questions on forms provided. Self-identification by questioners was optional in all cases. It was found that there was much greater interest in the forum discussions when the forum speakers addressed themselves to questions the trainees had asked them to talk about.

The Film Series*. Before each film, in order to stimulate group thinking, as well as for purposes of clarification and comprehension, a brief preview of the film topic was presented by a counselor. After the showing, general discussion took place among the group with a counselor as leader. Some were in agreement with the film situation and others in complete disagreement. Usually the same individuals responded to the various films shown. Occasionally, the poorly motivated trainees were sufficiently stimulated to the point of reacting to a specific film situation. The films that were apparently more meaningful and provocative were those that focused on the job or on the family. It was observed that the trainees were able to more readily relate these to their own situations or experiences.

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*See Appendix for list of films.

Group counseling may have two major purposes: (1) the dispensation of information and (2) the exchange of ideas through discussion of problems. From these discussion sessions, individuals may have found identification with specific concerns and obtained the full realization that theirs was a mutual problem and not a unique one. To hear discussions by their peers had great impact upon them, for they realized that they were not as different from others as they had thought.

In many instances, unless dispensing information, the counselor assumed a minor role. Occasionally, it was necessary to clarify misconceptions or to assist various group members to become aware of the priority of concern so that they could return to the topic. At the close of the discussion sessions, the counselor summarized all that transpired.

The counselor must be cautious never to place reticient individuals in the spotlight. Instead, he must attempt to create an atmosphere of warmth, friendliness, and acceptance so that all trainees will feel free to verbalize their feelings. Eventually, many of the earlier reluctant persons will develop sufficient confidence to actively participate, although on a lesser scale than their more aggressive peers. The more verbal trainees talked freely, exchanging ideas, recalling experiences. The less aggressive but responsive persons usually nodded their heads in consent or agreement as they displayed a supportive role.

On occasions, some sessions were deliberately left unstructured for the encouragement of free expression of concerns. Discussions might range from dissatisfaction with specific program policies to varied classroom displeasures. These discussions provided an excellent opportunity to release pent-up hostilities. During the sessions, the counselor assisted in clarifying misunderstanding or misinterpretations. At other periods, various members of the group helped in clarifying situations, offering their points of view. Those trainees possessing more positive and mature attitudes contributed greatly during these sessions. Negative attitudes were frequently rejected by the group. This was observed more near the close of the program than in the beginning sessions.

## Individual Counseling

Individual counseling stemmed from group counseling with the participants in the project. Each trainee who sought assistance wanted it then, not later. Trainees did not demand formalized settings for individual counseling. They were not particularly acclimated to formal office settings; therefore, a place that was private and convenient served as a conference area. Sometimes an out-of-doors setting, a classroom, and even the counselor's car might serve for a conference. Privacy and the time the trainee needed a counseling session were the elements of primary importance which induced trainees to share confidences and seek assistance in the solution of problems.

Trainees sought social, occupational, and educational information. The more personal concerns were physical ailments, marital difficulties, parent-child relationships, and financial complexities.

Those who sought the counselor's assistance voluntarily were expressive and concerned about their adjustment and the effect their adjustment had upon their work in school. Monumental problems dwindled when the trainee discovered someone with a listening ear who would guide his thinking-out the solution of problems.

Establishing a one-to-one relationship with the adult trainee is not a spontaneous reaction. A meaningful counselor-trainee relationship usually develops slowly. In some cases, the relationship may require several weeks to develop and in other cases several months.

The adult trainee frequently appears to have an innate suspicion of the counselor or what the counselor represents. This attitude may serve as a temporary deterrent to establishing a relationship based on mutual trust and respect. Therefore, the relationship should not be coerced by the counselor because the trainee may interpret the interest shown as too patronizing or condescending.

The initial contact with the trainee is often the most important one because it helps set the tone for the type of relationship to exist between counselor and trainee. For this initial contact, the counselor must be adept in expressing a simple, clear, easily understood meaning to the trainee and yet he must be careful not to create a paternalistic relationship which may be resented by the adult trainee.

Four methods or techniques used in counseling with the trainees appeared to help establish rapport: (1) allowing the relationship to develop naturally, (2) acceptance, (3) using the group approach to identify individual problems and (4) flexibility in the counseling service.

During the period between the two required conferences, the trainees were encouraged to take advantage of the individual counseling services. However, it became apparent that some of the trainees had more need for these services than others. Many of the trainees were able to adjust successfully to the training and appeared to be capable of handling their individual problems satisfactorily. Consequently, the counseling staff was careful not to force this service on any trainee that had made an adequate adjustment to the program. Usually, this particular group would refer themselves for counseling if there was a need. In other cases, it was necessary to request a conference with trainees when they needed special help in areas such as personal hygiene, attendance, attitude, and taking care of their financial obligations. It was the counselor's responsibility to be able to distinguish between the types of needs of trainees, and to give priority to those who apparently had more serious needs than others.

The small group counseling sessions also provided another opportunity for establishing rapport with the trainees. The use of group approach to identify individual problems appeared to motivate the trainees into a new awareness of themselves. They became more responsive and appeared to release some of their inhibitions concerning their relations with the counselor. Frequently, after a group session was terminated, a trainee would ask the counselor to remain to talk with him about a personal problem. The self-referrals of this nature became more numerous as the program progressed. In addition, this type of counselor-trainee interaction provided an opportunity for the counselor to suggest the advisability of a follow-up conference. Most of the trainees were receptive to the suggestion of a follow-up conference and were conscientious about keeping their appointments.

Individual conferences with some of the mature trainees proved often to be a valuable experience for the counselor. It is very easy for the counselor to interpret limited self-expressions for lack of understanding. In many cases, the experiences that the trainees had prior to entering the program had enriched their understanding of life, even though they could not always communicate this impression. The counselor had to be constantly alert for key words and colloquial expressions in the trainees' conversations that would help to encourage self-expression. Repeating the key word or colloquialism that the trainee had used often encouraged him to elaborate on the subject and accept the counselor as someone who understood what he was talking about. Needless to say, elaboration of the subject helped the counselor to gain insight into what the trainee was trying to communicate. Whenever it was possible to establish a working dialogue between counselor and trainee, the trainee was ready to begin thinking through his problems and with some guidance from the counselor, work out possible solutions.

Less articulate trainees requested individual sessions. Asking for a conference indicated that each one felt he could not cope with his problems alone. Although the individual knew he had a problem and wanted help, stating his problem became a matter of grave concern. Therefore, each question from the counselor was structured so that the trainee had to talk to express his views. As a result, after one or two questions, the trainee would relax and continue to talk about his area of concern. Termination of an individual counseling session was usually made by the trainee who requested it.

## Facing the Problems of Individuals

From time to time, counselors found it necessary to discuss with both the technical skills instructors and basic skills instructors information about trainees and difficulties, or problems, they were encountering. In fact, on occasions, it was even necessary to discuss with the project director specific problems concerning trainee adjustment, progress, morale or other problems that warranted his attention. It was important that program policies or specific regulations be clarified. When on a few occasions, there was general dissension or minor discord due to lack of comprehension or clarification, this was communicated to the program director who in turn was in position to provide clarification. His remarks to the trainee body helped to answer basic questions and raise group morale. Once any disturbances were observed, action was immediately taken. It was necessary that the counselor function in other areas outside of counseling on a few occasions due to the fact that the morale of the men and women with whom one works is of supreme importance--lowered morale may affect their total performance in any or all segments of their training. Working with the trainees and leaders in their group activities, the counselors were in a key position to observe and to learn about discontent, faulty interpretations, and misconceptions that frequently prevail with persons of limited educational background.

For example, when the trainees' transportation allowance had been reduced, there was considerable discontent among those affected. A request was made to the program director for special assistance in clearing up this situation, and he dealt with the problem to the trainees' satisfaction. Trainees were permitted to submit their grievances to the program officials who investigated and settled them through correspondence.

The counselors and members of the staff exchanged insights on such trainee problems as chronic absenteeism, maladjustment, excessive talking, negative attitude toward instructors or skills, excessive teasing of fellow trainees, leaving class unofficially, refusal to perform class assignment, financial difficulties. Through these informal communicative periods, counselors became aware of various problem areas that were general in nature or peculiar to specific trainees. These general problems were brought to the group counseling discussions and were discussed from various points of view or frames of reference. Specific problems were reviewed in individual counseling sessions with those persons concerned.

Whenever referrals were made to counselors, they responded by making a counseling appointment with the trainee in question; difficulties were then discussed and alternatives explored. At other periods, informal conferences were held for purposes of discussing trainee difficulties and progress. Instructors' observations, together with counselors' insights, helped in clarifying some problem situations.

Frequently, counselors were in a position to explain specific reasons for basic attitudes or behavior exhibited by trainees. Background data and verbalized feelings made this possible.

A trainee who had been absent quite frequently because of illness became apprehensive and worried about his being away from the program and the effect of his absence upon his classes. After conferring with staff members, the counselor was able to allay his fears.

Another trainee had difficulty in arriving to class on time. It was revealed through a counseling session that he had tremendous responsibilities at home because of the absence of his wife. There were small children to be cared for. This information shed more light on the cause of his excessive tardiness.

On another occasion, a trainee in one of the building trade areas saw little practical value in a class assignment and refused to do the work. He was referred for counseling. This very subject was brought into one of the group counseling sessions. The trainees were discussing various aspects of their training and how each would contribute to effective performance on the job. A trainee discussed the merits of knowing how to read blueprints. The trainee who refused to do this very assignment (drawing blueprints) aired his grievances. His fellow trainees had answers for him from all sides. He alone had the opposing viewpoint. Other trainees indicated they had gained considerable knowledge from having had to draw blueprints even though it was a long and tedious task. The counselors, in introducing this specific topic for discussion, hoped that the discussion would follow the course that it took.

In a subsequent interview, it was found that the discussion by his peers considerably altered the trainee's attitude toward the assignment. He obtained a special pad on which he completed his assignment.

Referrals were made by teachers in a few cases when trainees had been late for class. In these cases, relationships of class tardiness and work tardiness were pointed up and were readily understood by the trainees. After a conference concerning tardiness, trainees had no difficulty in being punctual for other engagements for which they were responsible.

Trainees, in some cases, were referred to agencies in the area. Where a trainee needed medical assistance for himself beyond that provided by the Student Health Service at John A. Andrew Hospital on Tuskegee Institute's campus, or for some member of his family, referral was made to the Vocational Rehabilitation representative by the director of social services. Referrals were made to the same agency for the trainees found to have vision difficulties. Those who lacked the necessary funds were assisted by this agency in securing necessary vision corrections.

## Guidance

In the last three months of the project, the counselors found themselves more effective in dealing with individual concerns. Several things had happened in the previous nine months; confidence and rapport had been established; test results were available; teachers and counselors had come to know the trainees as persons; the trainees themselves had become a group rather than an assemblage of anonymous individuals; and trainees, teachers, and counselors "understood" each and all. Changes in behavior were noted; for example, a trainee who rated low on the literacy test and was apathetic at the onset of training, passed the High School Equivalency Test; a "bad actor" at the beginning of training, he had become cooperative, and vocally expressed ambition for himself and his children.

The counseling staff undertook a sociometric description of trainees in the tenth month of training. As designed, the trainees made appraisals of each other in terms of vocational competence, personal appreciation, and social acceptance. The ratings were made on a four point scale - stars, highly acceptable, acceptable, and isolates. This peer group appraisal gave counselors information to use in sending trainees out to jobs. Peer group ratings are important in that they show how a trainee stands in various categories in the estimation of other trainees. These ratings may predict to even a greater degree than teacher evaluations how successful the trainee will be in the job situation.

The next chapter is concerned with a leadership development experiment, which involved the families of selected trainees; and some of the business and civic leaders in their communities.

# CHAPTER VI

# COMMUNITY INVOLVEMENT EXPERIMENT

The objectives of the community experimental program were: (1) to determine what characteristics of the trainees were associated with success in training; (2) to determine if the community involvement of the trainees showed a reflection on their interest, performance, and attendance in training; (3) to compare the trainees to the experimental group with those of the control group; and (4) to determine what other variables relevant to community involvement are related to success in training.

From these objectives, the following hypotheses were set forth:

1. Community support is related to success in training.
2. The motivation of the trainees by their wives or families is related to success in training.
3. Giving the trainees leadership roles in their communities where they can be observed by their families and the community as a whole will serve as a motivation to the subjects in training.

At the outset, a questionnaire (see Appendix) was designed for the purpose of obtaining information relevant to the community involvement of the trainees. The information secured from this questionnaire along with that obtained from records on file served as the instrument by which to determine whether or not the trainees met the selection criteria. After the trainees were screened for use as the experimental group, an interview schedule (see Appendix) was designed so that information could be secured from their wives pertaining to the community involvement of the family and their attitudes toward their spouses' training.

The total number of trainees enrolled in the Experimental and Demonstration program represented 20 Alabama counties; however, only those trainees from Bullock and Elmore Counties were used as the population from which the participants of the community experimental program were selected. This action was taken because a larger number of trainees were concentrated in these counties than in any other one or two counties, and because more homogeneity existed among these people in terms of their community life and family characteristics.

Trainees included in the community involvement experiment were married males with children attending either church or school in the towns of Union Springs and Wetumpka. Married men were studied rather than single men because such men are usually considered to be more stable members of the community. Those with children attending local churches and/or schools are more likely to be involved in community activities and are therefore capable of becoming community leaders.

Of the 42 male trainees from Bullock and Elmore Counties, 26, or 62 percent, met the criteria for selection. These 26 trainees represented 29 percent of the total male participants in the project. Of the 30 male trainees from Bullock County, 17 or 57 percent met the selection criteria and of the 12 male trainees from Elmore County, nine or 75 percent, met the selection criteria. Twenty-one of 26 wives of the trainees were personally interviewed at their respective homes. These interviews were aimed at securing information relevant to the community involvement of the family, determining whether the wives motivated or discouraged their husbands' training, and determining how participation in the project by the household head affected the family. Generally, the wives were very enthusiastic over their husbands' training. Fourteen of 21 of the wives (67 percent) reported that they encouraged their husbands to enroll in the project.

Before the actual screening began, the entire trainee population, both males and females, was given an orientation as to the general design of the program, the selection criteria, and the things that would be required of the participants. A chairman for each of the two counties involved was selected by the trainees of each of the two groups. The reaction of the trainees to the idea of the experimental grogram was quite favorable; however, in the time that followed, many of the trainees asked questions concerning why there would be all male participants in the experiment and why were trainees from counties other than Bullock and

Elmore not chosen to participate. Although these questions were answered during the orientation period, many trainees sought a more detailed explanation later. Further information about the experiment was provided in follow-up meetings. Individual explanations were given to some trainees who seemed concerned about non-participation.

In order to determine how representative the sample was of the population, the mean, standard deviation, and range of the score of three tests for both the sample and the population were computed. These tests were the Iowa Tests of Basic Skills, the Revised Beta Examination, and the Gray Oral Reading Test. Table XXIV shows the mean, standard deviation, and range of each of the three sets of test scores for the sample and the population. The mean score on the Iowa Tests of Basic Skills was 5.2 for the sample and 5.8 for the population. This was not a great amount of difference; however, when applying the standard deviation of both sets of scores on a frequency distribution curve, the scores for the sample varied little from the mean while those for the population varied widely. The scores for the sample ranged from approximately two standard deviations below the mean to two above the mean. The scores for the population ranged beyond five standard deviations from the mean in both directions. It was, therefore, concluded that much more variation existed among the scores of the population than did among the scores of the sample; however, there was little difference between the means of the two groups.

## TABLE XXIV

## MEAN, STANDARD DEVIATION, AND RANGE OF THE SCORES OF THREE TESTS FROM SAMPLE AND POPULATION

| | Iowa Test of Basic Skills | | Revised Beta Examination | | Gray Oral Reading Test | |
|---|---|---|---|---|---|---|
| | Sample | Population | Sample | Population | Sample | Population |
| Mean | 5.2 | 5.8 | 84.5 | 85.9 | 6.6 | 7.7 |
| Standard Deviation | 1.2 | .37 | 8.2 | 9.3 | 3.1 | 3.0 |
| Range | 3.1-7.5 | 1.4-8.9 | 59-105 | 56-109 | 1.9-12.0 | 1.0-12.0 |

The mean score on the Revised Beta Examination for the sample and the population varied little, 84.5 and 85.9 respectively. This yielded a difference between the means of the two groups of 1.43. The scores ranged approximately three standard deviations from the mean in both directions, below and above. This revealed that there was very little difference in the performance on the test by the sample when compared with the population.

The scores of the Gray Oral Reading Test for the sample and the population produced similar results. The difference between the means of the sample and population was 1.1, the mean score for the sample being 6.6 and for the population 7.7. The scores for the sample ranged from 1.5 standard deviation below the mean to almost three above the mean. The scores for the population ranged from approximately 2.5 standard deviations below the mean to almost two above the mean.

The information from these three sets of test scores statistically revealed that the sample was, generally, very representative of the population. It might be inferred here that the interest and performance and attendance of the members of the sample or experimental group would closely approximate that of the population. It might be added that even though the sample was representative of the population as a whole, there were individuals with outstanding records in both groups.

## Planning of Activities

Basically, the experimental design was centered around the community involvement of the trainees in relation to their performance in training and their potential roles as community leaders. For these reasons, a total of six cultural activities were planned for presentation in the communities where the trainees lived. An additional six campus activities were planned by the use of Tuskegee Institute's Calendar of

Events for the year. The trainees were given certain leadership roles of responsibilities in presenting the community activities such as planning, publicizing the activities, and introducing them to the people of the community. Although they had been given this responsibility, the trainees had little to do with the planning of the activities except those that were presented at the Institute, and those that were voluntarily presented by different groups.

Transportation for the trainees and their families was provided to and from the campus activities by the Central Transportation Department of Tuskegee Institute. All transportation costs were financed by the project. The trainees used their own private transportation to travel to and from the community activities which were held in the school auditoriums of Carver High School in Union Springs, Bullock County, and Doby High School in Wetumpka, Elmore County.

The school was chosen as a center for the community activities because of its desirable location and its ties with the people, especially those with school age children. The use of the school auditorium was cleared through the principals of the two schools involved. Personal visits were made to each school by the research staff and follow-up letters were mailed later. Some of the trainees also contacted the principals of the schools to inquire about the use of the school as a center for the community activity.

The same community activity was presented in each of the two communities. This called for two performances of the same activity on different dates. The trainees from Bullock County took the responsibilities of publicizing and introducing the community activities to the people, and the trainees from Elmore County did likewise in presenting theirs.

## Activity Schedule

Talent Show. The experimental participants from Elmore County presented their first community activity on November 11, 1966, in the Doby High School Auditorium, Wetumpka, Alabama. Those from Bullock County presented theirs on November 17, 1966, in the Carver High School Auditorium, Union Springs, Alabama. It was the consensus of both groups of experimental participants to present a talent show as their initial community activity.

The planning and arrangements for the presentation of the activity in both counties were partially undertaken and implemented by the trainees; however, due to a time factor, a considerable amount of the planning was assumed by the advisors of the experiment. The chairman of each group took the responsibility of preparing and delivering a short speech explaining the purpose of the Experimental and Demonstration project and the Community Experimental program. This was undertaken with a great amount of enthusiasm and seriousness by both chairmen; however, the chairman of the Elmore County group needed less help in preparing his speech than the chairman of the Bullock County group.

Handbills, posters, and verbal invitations were used to advertise the program. The handbills were divided among the trainees for distribution in their various communities.

The audience at the talent show was composed mostly of school age children and rural adults. Five of the nine trainees of the Elmore County group were present. Two children and two wives of the trainees were also present. The audience, as a whole, was very responsive to the program. Approximately 150 people attended the activity.

The trainees seemed very interested, and their participation was good. They did everything they could to see that the program was carried out properly. Factors that negatively influenced attendance were:

1. The weather was inclement
2. Many people had not concluded their work day
3. Many people had transportation difficulties

The talent show was presented again in Bullock County by the experimental participants for that area. The audience was composed of parents, children, and babies. Nine, or 53 percent, of the 17 trainees of the Bullock County group were present. Fifteen children and seven wives of the trainees were present. The audience responded to the performance with enthusiastic applause and was sometimes disorderly and unrestrained.

The Bullock County group was very poorly coordinated by its chairman, who showed little initiative. The program, however, seemed to have been well-advertised by the group. The interest of the group was very high during the planning of the program, but when the time came for action or cooperation, there was little. At a follow-up meeting, most of the trainees reported that they enjoyed the program very much.

Campus Tour. The first campus activity for the Bullock and Elmore Counties experimental group was held on November 20, 1966. This was a tour of the Tuskegee Institute campus that terminated with dinner in the cafeteria. The highlights of the tour were:

1. Booker T. Washington Monument
2. John A. Andrew Memorial Hospital
3. School of Veterinary Medicine
4. Russell Nursery School
5. The Oaks - formerly the home of Dr. Washington
6. Carver Research Foundation
7. Tompkins Hall - Cafeteria

Several days prior to the tour a meeting was held to discuss the plans for the tour. Each trainee who planned to participate signed his name and indicated the number of persons from his family that would attend. This was done to obtain an estimate of the amount of transportation that would be needed. In addition, information was released as to the time and place the transportation would be available to pick them up. The necessary arrangements were made with Central Transportation and the Institute's cafeteria. Mimeographed copies of touring sites were secured from the Institutional Development Office of Tuskegee Institute to distribute to the trainees and their families.

Eleven of the 26 trainees were present along with nine wives and 16 children. Of the 17 trainees from Elmore County, six were present, and of the nine trainees from Bullock County, five were present.

There was little interest and participation by the group. The trainees that were present at the tour reported in a follow-up meeting that they enjoyed the tour.

Concert: Institute Choir. The second activity was held on December 18, 1966. This was a concert by the Institute choir. Prior to the concert, a meeting was held with the participants of the experiment to discuss the time and place they were to be picked up and to secure the number of persons from each family that would attend. Some of the trainees stated that they could not attend because of weekend commitments. Transportation was arranged by the research advisors.

The trainees showed a high degree of interest, and their participation as a group was good. Eighteen, or 69 percent, of the 26 trainees attended the activity. Twenty-six children and 15 wives of the trainees also attended the activity. Some of the trainees reported at a follow-up meeting that they did not like the activity because they did not understand all that went on.

A community activity was not held during the month of December because of the small number of working days in that month and because of the difficulty in finding sponsors to present a program.

Little Theatre Presentation. The presentation of the play entitled "The Bald Soprano" by the Little Theatre group of Tuskegee Institute was used as the community activity for the month of January 1967. The first presentation of the play was made on January 20 in Elmore County and on January 21 in Bullock County. Mimeographed leaflets were used to advertise the play in the various communities.

In Elmore County, seven of the nine trainees attended the activity. Three children and three wives of the trainees were also present. The audience was composed mostly of school children and a few adults. The audience was disorderly at times. Approximately 30 people attended the activity.

At a follow-up meeting, most of the trainees reported that they enjoyed the play, but did not understand it. All they knew was that it was a very humorous play.

In Bullock County, ten of the 17 trainees attended the activity. Eighteen children and seven wives of the trainees were also present. The audience was composed mostly of adults from the rural areas and a few children. Few, if any, of the people from the town or urban area attended.

The performance received a warm and enthusiastic applause. The trainees reported that they enjoyed the activity very much.

Soldier Variety Show. A Soldier Variety Show was presented as the third campus activity on January 28, 1967. Sixteen, or 62 percent, of the 26 trainees were present. Twenty-seven children and 13 wives of the trainees were also present. The trainees reported that they and their families liked the activity very much.

St. Louis Symphony Orchestra. The campus activity for the month of February 1967, was the performance by the St. Louis Symphony Orchestra. This was the fourth campus activity of a series of six. Only eight of the 26 trainees were present along with 11 children and seven wives. The trainees seemed to have been interested in the idea of attending a symphony; however, many were disappointed after the performance. They reported in a follow-up meeting that they did not like the music and that it was boring.

Factors that influenced the attendance of the trainees were:

1. Rainy weather
2. Late arrival of transportation

After the activity ended, the trainees had to wait for approximately two hours for the transportation to arrive. There were many expressions of discouragement and anxiety by the trainees. They also made complaints of the driving of the buses that carried them to and from the activities. Questions were asked later about what would happen in the case of an accident and people were injured. As a result of this, the drivers of the buses were cautioned about their driving.

Dance Exhibition. A dance exhibition was presented as the community activity for the month of February 1967. It was held in Elmore County on February 19, and in Bullock County on February 20. Handbills and posters were used by the trainees to advertise the activity in both counties. The exhibition was centered around the roots of jazz and modern dance.

Five of the nine trainees of the Elmore County group were present along with 11 children and five wives. There were approximately 40 people in the audience which consisted mostly of the trainees and their families. The audience was not very responsive to the performance.

Fifteen of the 17 trainees of the Bullock County group attended the activity. This was a big improvement in over all attendance for the group. The trainees were very cooperative in helping to clean and prepare the auditorium for the performance.

The audience was composed mostly of rural adults and children. They responded with warm applause at the end of each act. From general observations, this was an activity that they enjoyed very much. There were approximately 85 people present.

Band Concert. A band concert was presented on March 12, 1967, as the campus activity for that month. Only five of the 26 trainees were present. Five children and four wives of the trainees were also present. The weather was bad and there were transportation difficulties.

The trainees reported at a group meeting that they did not like the kind of music that was played at the concert. They were concerned over the transportation difficulties. Transportation was provided as usual by the Central Transportation Department of Tuskegee Institute.

Calisthenics Exhibition. The Physical Education Department of Tuskegee Institute presented a calisthenics exhibition which was used as the community activity for the month of March 1967, in Elmore and Bullock Counties. The exhibition was advertised by the trainees through handbills and verbal and written invitations. A van was rented by the project to transport the gymnastic equipment to and from places of presentation.

Eight of the nine trainees of the Elmore County experimental group attended the activity. Twenty children and five wives of the trainees also attended. The remainder of the audience consisted of rural adults and children. From their expressions, they seemed to have enjoyed the activity.

The exhibition was held in Bullock County on the following night. Twelve of the 17 experimental participants from that area attended the activity. The families of the trainees that were present included 22 children and nine wives. The remainder of the audience was composed of rural adults and school children.

At both presentations, the trainees were very cooperative in helping to arrange for the activity. In the follow-up meeting, they reported that they enjoyed the exhibition.

Military Day Activities. The last campus activity was held on April 15, 1967. This was the annual Military Day activities. Only six of the 26 trainees were present. Ten children and two wives of the trainees attended. It was assumed that the reasons for the poor attendance were:

1. The activity was held on the weekend and at a time when most people were planting and cultivating crops.
2. Transportation difficulties.
3. Very little interest by the trainees to attend such an activity.

## Summary

Although the trainees derived some benefits from the community involvement experiment, the objectives of this aspect of the project were not realized for various reasons. One major deficiency was that the trainee population was more widely dispersed in the communities than had been anticipated; therefore, it was difficult to work with them as a homogeneous unit. Another was that the available activities for participation were limited. Many of those provided were of such a nature that they held little or no interest for the trainees. A logical conclusion would seem that certain cultural "middle class" activities may not be "good" for disadvantaged adults who have had restricted or no exposure to them during their formative years. Further, it would seem that the children of these adults need to develop artistic tastes through enriching experiences prior to, and during their early years in school.

# PART 5

## WHAT

CHAPTER VII. Evaluation of Performance in Training

CHAPTER VIII. Job Development, Placement, and Performance on Job

CHAPTER IX. Analysis and Conclusions

# CHAPTER VII

# EVALUATION OF PERFORMANCE IN TRAINING

## Groupings of Trainees and Gross Differences Between Groups

Male trainees were divided equally[*] into three technical training groups: carpentry, brickmasonry, and meat processing; and into two literacy categories: "A" - those with higher than eighth grade equivalency, and "AA" those with less than eighth grade equivalency according to Gray Oral Reading Test. A logical preliminary consideration is the differences between the groups in characteristics that might have relevance to success in the training experience.

## Technical Training Groups

Some age selection appears to have taken place in grouping for technical training. There are significant differences in age composition of the three groups.

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[*] Since the numbers in the categories are constant, tables in the text will use percentages rather than repeat the numbers.

## TABLE XXV

## AGE DISTRIBUTION IN TECHNICAL TRAINING GROUPS

| | Training Group | | |
|---|---|---|---|
| | Carpentry | Brickmasonry | Meat Processing |
| Age Group | Percentage | | |
| Under 30 | 23 | 39 | 50 |
| 30 - 39 | 35 | 42 | 27 |
| 40 and over | 42 | 19 | 23 |
| Mean Age | 37.0 | 31.7 | 33.7 |
| Standard Deviation | 6.8 | 7.6 | 7.7 |

Contrasts between the groups were readily apparent. Emphasis on age differences between the groups may be shown by indicating that two-thirds of all trainees below age 30 were enrolled in meat processing, one-half of those over 40 were enrolled in carpentry, and in the middle age range, 30 - 39 years, the percentages of enrollment were: carpentry 34, brickmasonry 41, meat processing 25.

If the Revised Beta Examination is accepted as a crude measure of intellectual ability, differences between these groups may be described. None of the trainees received a score of more than 109, the upper limit of the "average" score range on this test. The following was the distribution of test scores:

## TABLE XXVI

## DISTRIBUTION OF SCORES ON REVISED BETA EXAMINATION IN TECHNICAL TRAINING GROUPS

| | Training Group | | |
|---|---|---|---|
| | Carpentry | Brickmasonry | Meat Processing |
| IQ Scores | | Percentage | |
| Average | 42 | 35 | 43 |
| Below Average | 29 | 29 | 43 |
| Inferior or Defective | 29 | 36 | 14 |
| Mean Score | 87.0 | 84.3 | 87.3 |
| Standard Deviation | 12.4 | 11.9 | 9.8 |

Of the trainees whose scores were in the inferior and defective category, the percentages in each training group were brickmasonry 46, carpentry 37, and meat processing 17. Differences in the average category scores were not so great; the percentage being: carpentry and meat processing 35, and brickmasonry 30.

Effective literacy was determined by use of the Gray Oral Reading Test, by which trainees were given a school grade level on the basis of the test score.

### TABLE XXVII

### DISTRIBUTION OF ENTRANCE READING TEST SCORES IN TECHNICAL TRAINING GROUPS

| Reading Test Score (Grade Level) | Carpentry | Training Group<br>Brickmasonry<br>(Percentage) | Meat Processing |
|---|---|---|---|
| Below 4 | 13 | 16 | 0 |
| 4 - 7 | 58 | 51 | 37 |
| 8 - 11 | 19 | 10 | 40 |
| 12 and more | 10 | 23 | 23 |
| Mean Score | 6.8 | 7.4 | 8.4 |
| Standard Deviation | 2.8 | 3.5 | 3.0 |

Of those trainees scoring on the reading test below the eighth grade level, the percentages were: carpentry 41, brickmasonry 39, meat processing 20. Of those scoring above the eighth grade level, the percentages were: carpentry 24, brickmasonry 26, meat processing 50.

In terms of the clearly obvious characteristics -

The meat processing trainees as a group were younger, had higher I.Q. scores, and had a higher literacy level than the other two groups.

The carpentry trainees as a group were older with 40 percent of their number over age 40, double the meat processing percentages, having inferior or defective I.Q. Scores, and the highest percentage of trainees who tested below the eighth grade reading level.

The brickmasonry trainees as a group had the smallest percentage of trainees over age 40, less than half that of carpentry, the highest percentage of trainees with inferior or defective I. Q. scores and only a slightly smaller percentage reading below the eighth grade level than the carpenters.

## Literacy Level Groups

Literacy level was used as the criterion for differentiating between trainees with those who read below the eighth grade level being put in Group "AA" and those who read above the eighth grade level in Group "A". The actual reading level division was:

TABLE XXVIII

READING LEVEL AT ENTRY TO TRAINING

| | GROUP "A" | GROUP "AA" |
|---|---|---|
| | (Percentage) | |
| Below Eighth Grade | 21 | 96 |
| Eighth Grade and Above | 79 | 4 |
| Mean | 9.6 | 4.9 |
| Standard Deviation | 2.3 | 1.5 |

The age range set for enrollment in the training program did not permit education being a function of age. Age differences between the "A" and "AA" groups were:

TABLE XXIX

AGE DISTRIBUTION IN LITERACY GROUPS

| AGE GROUP | GROUP "A" | GROUP "AA" |
|---|---|---|
| | (Percentage) | |
| Under 30 | 36 | 38 |
| 30 - 39 | 38 | 31 |
| 40 and over | 26 | 31 |
| Mean | 32.7 | 34.1 |
| Standard Deviation | 7.7 | 8.1 |

When I.Q. scores were considered, the following is the distribution:

## TABLE XXX

## REVISED BETA IQ SCORES OF LITERACY GROUPS

| IQ SCORES | GROUP "A" | GROUP "AA" |
|---|---|---|
| | (Percentage) | |
| Average | 51 | 31 |
| Below Average | 34 | 29 |
| Inferior or Defective | 15 | 40 |
| Mean | 89.5 | 82.4 |
| Standard Deviation | 11.1 | 10.6 |

It is interesting to note that in Group "AA" where 96 percent of the trainees read below the eighth grade level, 40 percent had I.Q. scores classified as inferior or defective while in Group "A" where 79 percent of the trainees read at the eighth grade and above level, only 15 percent had I.Q. scores classified as inferior or defective. However, when the correlation coefficient between entrance reading level and the Revised Beta I.Q. score is obtained it is not significant.

## TABLE XXXI

## CORRELATION BETWEEN ENTRANCE READING LEVEL AND IQ SCORES

| | Entrance Reading Level | |
|---|---|---|
| | GROUP "A" | GROUP "AA" |
| Revised Beta IQ Score | r = .13 | r = .34 |

The level of emotional health as described by the Emo Questionnaire was as follows:

## TABLE XXXII

## INTERNAL ADJUSTMENT SCORE

| | GROUP "A" | GROUP "AA" |
|---|---|---|
| | (Percentage) | |
| Above average | 47 | 49 |
| Average | 28 | 42 |
| Below Average | 21 | 4 |
| Not Reported | 4 | 4 |
| Mean | 55.3 | 59.3 |
| Standard Deviation | 16.0 | 11.6 |

## TABLE XXXIII

## ENVIRONMENTAL ADJUSTMENT

| | GROUP "A" | GROUP "AA" |
|---|---|---|
| | (Percentage) | |
| Above average | 19 | 9 |
| Average | 43 | 49 |
| Below average | 34 | 38 |
| Not Reported | 4 | 4 |
| Mean | 46.9 | 44.0 |
| Standard Deviation | 14.6 | 12.4 |

## TABLE XXXIV

## OVERALL ADJUSTMENT

| | GROUP "A" | GROUP "AA" |
|---|---|---|
| | (Percentage) | |
| Above Average | 36 | 38 |
| Average | 36 | 44 |
| Below Average | 23 | 13 |
| Not Reported | 4 | 4 |
| Mean | 52.7 | 55.1 |
| Standard Deviation | 15.6 | 13.6 |

Except for the differential in literacy there were no marked differences in the "A" group and the "AA" group in age, IQ scores, and level of emotional health. An exception is that the higher literacy level group had a percentage below average on the internal adjustment scale five times that of the lower literacy level group.

## Performance of Trainees in Each Technical Training Area

A few simple measures (see Appendix) were decided upon to give some idea of the performance of trainees in the period of their instruction. First, there was the attempt to determine entry level of performance in the technical skills for which they were to take training, and the entry level of performance in basic education skills. Second, there were periodic evaluations of the trainees by teachers on two scales: (a) Course Performance Rating, and (b) Personal Characteristics Rating. These ratings instruments were designed to determine the ability of instructors to evaluate the performance of those they taught, as well as to indicate any change in the performance of the trainees.

### Entry and Exit Levels of Performance

The Iowa Tests of Basic Skills was administered three times, June 1966, December 1966, and June 1967. This battery undertook measurement of performance on vocabulary, reading, language and arithmetic in terms of school grade level. Following are results of the tests reported for each technical training area and Sub-groups "A" and "AA" within each training area.

## TABLE XXXV

## VOCABULARY

| | Meat Processing | | Carpentry | | Brickmasonry | |
|---|---|---|---|---|---|---|
| | "A" | "AA" | "A" | "AA" | "A" | "AA" |
| June 1966 | 5.6 | 5.0 | 7.2 | 4.2 | 7.0 | 4.4 |
| December 1966 | 7.0 | 5.5 | 7.5 | 4.6 | 7.3 | 4.5 |
| June 1967 | 7.6 | 5.8 | 7.4 | 5.3 | 7.8 | 4.7 |
| Gain between June 1966 and June 1967 | 2.0 | 0.8 | 0.2 | 1.1 | 0.8 | 0.3 |

## TABLE XXXVI

## READING

| | Meat Processing | | Carpentry | | Brickmasonry | |
|---|---|---|---|---|---|---|
| | "A" | "AA" | "A" | "AA" | "A" | "AA" |
| June 1966 | 6.6 | 5.0 | 6.4 | 3.4 | 6.3 | 3.9 |
| December 1966 | 6.6 | 4.8 | 6.3 | 4.1 | 6.6 | 4.0 |
| June 1967 | 7.3 | 5.8 | 7.4 | 6.0 | 7.3 | 4.4 |
| Gain between June 1966 and June 1967 | 0.7 | 0.8 | 1.0 | 2.6 | 1.0 | 0.5 |

## TABLE XXXVII

## LANGUAGE

| | Meat Processing | | Carpentry | | Brickmasonry | |
|---|---|---|---|---|---|---|
| | "A" | "AA" | "A" | "AA" | "A" | "AA" |
| June 1966 | 5.4 | 5.0 | 6.3 | 3.9 | 6.4 | 3.7 |
| December 1966 | 6.8 | 4.9 | 6.7 | 4.3 | 6.7 | 4.1 |
| June 1967 | 6.9 | 6.0 | 6.8 | 5.1 | 7.2 | 4.7 |
| Gain between June 1966 and June 1967 | 1.4 | 1.0 | 0.5 | 1.2 | 0.8 | 1.0 |

## TABLE XXXVIII

## ARITHMETIC

| | Meat Processing | | Carpentry | | Brickmasonry | |
|---|---|---|---|---|---|---|
| | "A" | "AA" | "A" | "AA" | "A" | "AA" |
| June 1966 | 7.1 | 5.7 | 6.3 | 4.5 | 6.6 | 4.1 |
| December 1966 | 7.6 | 6.3 | 7.3 | 4.8 | 7.7 | 5.0 |
| June 1967 | 7.8 | 6.8 | 7.4 | 5.8 | 8.6 | 6.1 |
| Gain between June 1966 and June 1967 | 0.7 | 1.1 | 1.1 | 1.3 | 2.0 | 2.0 |

## TABLE XXXIX

## GROUP "A" GAINS

| | Meat Processing | Carpentry | Brickmasonry |
|---|---|---|---|
| Vocabulary | 2.0 | 0.2 | 0.8 |
| Reading | 0.7 | 1.0 | 1.0 |
| Language | 1.4 | 0.5 | 0.8 |
| Arithmetic | 0.7 | 1.1 | 2.0 |

TABLE XL

GROUP "AA" GAINS

| | Meat Processing | Carpentry | Brickmasonry |
|---|---|---|---|
| Vocabulary | 0.8 | 1.1 | 0.3 |
| Reading | 0.8 | 2.6 | 0.5 |
| Language | 1.0 | 1.2 | 1.0 |
| Arithmetic | 1.1 | 1.3 | 2.0 |

From the foregoing figures there are three dramatic changes. In the meat processing (Group "A") there was an advance of two grade levels in vocabulary, in both the brickmasonry groups there was an advance of two grade levels in arithmetic, and in carpentry (Group "AA") there was almost a three-grade level gain in reading.

When we compare the gains in the "A"-Groups and the "AA"-Groups, we find confusion. There are intervening variables that require attention. These intervening variables are the characteristics of the groups being compared, and the instructors, since instructors of language and mathematics were assigned to one technical area. There was a mathematics instructor for brickmasonry, another instructor for carpentry, and still another for meat processing. The same was true for communications. These intervening variables may have influenced the education of the trainees, but for our appraisal the result is simply what it turned out to be.

Consideration of the effectiveness of technical training should include estimation of the knowledge about, and know-how of the vocation a person has prior to entry into training and what he knows at the conclusion of training. No accepted instrument is available to make the assessment we want, so one was devised and used. It is the previously described Nichols Proficiency Test. This test was administered prior to training, and at the conclusion of training with the following results:

TABLE XLI

| | Entry Score | | Exit Score | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| Not Reported | 8 | 8.7 | 9 | 9.8 |
| Below Average | 72 | 78.3 | 32 | 34.8 |
| Average | 8 | 8.7 | 25 | 27.2 |
| Above Average | 4 | 4.3 | 26 | 28.2 |

What this test shows is simply that about 13 percent of the trainees knew something about the vocation for which they were being trained when they entered training. The repetition of the test after training indicated what they learned in the process. There should be no implications about breadth of knowledge and proficiency on the basis of this test. It very simply says persons knew more about the job after training.

We proposed at the outset to get appraisal of the training experience from both teachers and trainees. Instruments (see Appendix) were developed to secure these appraisals. Trainee evaluation of instructors failed completely. All instructors were rated perfect. Trainees apparently were not reassured by our admonitions that anonymity would be carefully observed. We still need some measure of instruction by those being taught.

Details of instructor evaluations of trainees are in the Appendix. Below are summaries of these evaluations. The information given here is from instructor evaluations after three months (1)*instruction and after twelve months (2) **instruction.

For the two reporting periods, the instructors gave the following appraisal of their trainees:

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*(1) Indicates end of three months in Table on following page.

**(2) Indicates end of twelve months in Table on following page.

## TABLE XLII

## INSTRUCTORS' TOTAL APPRAISAL SCORE

| Rating | Carpentry (1) | Carpentry (2) | Brickmasonry (1) | Brickmasonry (2) | Meat Processing (1) | Meat Processing (2) |
|---|---|---|---|---|---|---|
| | (Percentage) | | | | | |
| Below Average | 16 | 10 | 19 | 10 | 0 | 6 |
| Average | 29 | 38 | 35 | 39 | 37 | 27 |
| Above Average | 48 | 45 | 39 | 45 | 53 | 57 |
| Not Reported | 7 | 7 | 7 | 7 | 10 | 10 |

No elaborate claims are suggested or to be inferred from the above appraisal. It simply reports what instructors thought about those whom they taught. According to the instructors' evaluations, six percent in one area and ten percent in two areas were not well trained. According to the instructors' standards, the other trainees had a chance of successful pursuit of the vocation for which they were trained. Nearly half in carpentry and brickmasonry and more than half in meat processing had more than an even chance to follow the vocation successfully.

We planned a system of evaluation by instructors that might be useful in prediction of employment success of trainees. The research staff had no involvement in the instruction area. The instructors agreed to make their evaluation on a scale prepared by the research staff. We can present here the results of teacher evaluations which are subjective.

If the testing of trainees had any value, we want to know how the psychologist's appraisal of input characteristics meets the instructors' appraisal of performance. What kind of people did the instructors have to deal with? The Emo Adjustment Scale can be related to instructors' evaluation. Less than 20 percent of the trainees were internally maladjusted on the Emo Scale. In their evaluation, instructors reported less than 10 percent of the trainees were below the average in their classes.

When the instructors evaluated their trainees, those they described as being below average in their classes were 60 percent below average on the Emo Environmental Adjustment Scale. It becomes important to remember that the trainees rated below average by instructors were also rated below average on the Emo Scale.

The Cassel Level of Aspiration scale was used to determine the goal aspiration of trainees when they entered training. Instructors evaluated trainees when they left the program. The results were:

TABLE XLIII

INSTRUCTORS' EVALUATION

| Aspiration Test Score | High | Low | Total |
|---|---|---|---|
| High | 9 | 9 | 18 |
| Low | 36 | 33 | 69 |
| Total | 45 | 42 | 87 |

It is apparent from this contingency table that there is no relationship between the results of the Cassel Level of Aspiration Test and instructors' evaluation of performance in training.

The extent of correspondence between instructor's evaluation and peer evaluation of proficiency in training is given in the following contingency table:

TABLE XLIV

INSTRUCTORS' EVALUATION

| Peer Evaluation | High | | Low | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| High | (29) | 69 | (13) | 31 | 42 | 100 |
| Low | (15) | 36 | (27) | 64 | 42 | 100 |
| Total | 44 | | 40 | | 84 | |

In approximately two-thirds of the cases, peer and instructor evaluations concur.

There is some correspondence between trainees' absentee record and instructor evaluation. The highest rated trainees had the fewest absences from classes and the trainees rated poorest had the most absences.

TABLE XLV

ABSENTEE RECORD AND INSTRUCTORS' EVALUATION

| Absentee Record | Below Average | Average | Above Average | Superior | Total |
|---|---|---|---|---|---|
| Not given | 0 | 4 | 3 | 0 | 7 |
| Less than 10 days | 0 | 15 | 19 | 4 | 38 |
| 10 to 19 days | 0 | 7 | 14 | 0 | 21 |
| 20 or more days | 7 | 11 | 6 | 0 | 24 |
| Total | 7 | 37 | 42 | 4 | 90 |

Several vignettes of trainees given highest ratings by their peers and designated "Stars" and those given lowest ratings and designated "Isolates" may give some view of trainees as seen in training by peers, counselors, and instructors.

Stars

1. Meat Processing "A"

Age - 26 IQ - 94

Educational Level - 10th Grade - Passed the GED Test during training.

Married - Two dependents

Occupational and Academic Scale - Above average (4.1)

Personal Characteristics Scale - Above average (4.5)

Counselor's Evaluation - Mature, personal appearance is very good. Is respected and liked by fellow trainees. Job potential should be good.

NOTE: Returned to same grocery chain in home town where he had previously worked.

2. Meat Processing "A"

Age - 29 IQ - 80

Educational Level - 10th Grade - Passed the GED Test during training.

Married - Four dependents.

Occupational and Academic Scale - Above average (4.3)

Personal Characteristics Scale - Above average (4.8)

Counselor's Evaluation - Determined, cooperative and responsible. Has leadership ability. Personal appearance is good. Is respected and liked by fellow trainees. Job potential should be good.

NOTE: Returned to job as chef at hospital in home town. Employer's evaluation indicates superior job performance and personal characteristics.

3. Meat Processing "A"

Age - 21 IQ - 85

Educational Level - 12th Grade

Married - Two dependents

Occupational and Academic Scale - Above average (4.0)

Personal Characteristics Scale - Above average (4.5)

Counselor's Evaluation - Cooperative and responsible. Has leadership ability. Personal appearance neat. Is respected and liked by fellow trainees. Job potential should be good.

NOTE: Employed as apprentice meat cutter in food chain. Employer's evaluation indicated superior to above average rating in job performance and personal characteristics.

4. Meat Processing "AA"

Age - 23 IQ - 83

Educational Level - 6th Grade

Single - Three dependents

Occupational and Academic Scale - Above average (4.1)

Personal Characteristics Scale - Above average (4.5)

Counselor's Evaluation - Pleasant, cooperative manner. Is well liked and respected by fellow trainees. Personal appearance is neat. Job potential should be good.

NOTE: Employer's evaluation indicated superior to above average in job performance and personal characteristics.

5. Meat Processing "AA"

Age - 35 IQ - 85

Educational Level - 12th Grade

Married - Nine dependents

Occupational and Academic Scale - Above average (4.2)

Personal Characteristics Scale - Above average (4.7)

Counselor's Evaluation - Well mannered and cooperative. Is liked and respected by other trainees. Personal appearance is neat. Job potential should be good.

NOTE: Employer's evaluation indicated superior to above average performance in job and personal characteristics. However, in responsibility received unsatisfactory rating. Trainee left job without notifying employer. Moved to Chicago. Employment status unknown.

6. Meat Processing "AA"

Age - 23 IQ - 96

Educational Level - 12th Grade

Single

Occupational and Academic Scale - Average (3.8)

Personal Characteristics Scale - Above Average (4.4)

Counselor's Evaluation - Cooperative, respected and liked by fellow trainees. Personal appearance neat. Job potential should be good.

NOTE: Trainee relocated in New York City. Has had difficulty adjusting to working conditions. Is no longer employed at initial placement. Present employment status unknown.

7. Brickmasonry "A"

Age - 42 IQ - 92

Educational Level - 8th Grade

Married - One dependent

Occupational and Academic Scale - Average (3.0)

Personal Characteristics Scale - Above average (4.0)

Counselor's Evaluation - Trainee is alert and mature acting. He is cooperative, well liked, and pleasant. He is always neat and clean in appearance.

8. Brickmasonry "AA"

Age - 21 IQ - 80

Educational Level - 8th Grade

Occupational and Academic Scale - Above average (4.0)

Personal Characteristics Scale - Superior (5.0)

Counselor's Evaluation - Trainee is anxious to perform tasks well. He is pleasant, cooperative, and relates well with others.

9. Brickmasonry "AA"

Age - 24 IQ - 85

Educational Level - 11th Grade

Single - No dependents

Occupational and Academic Scale - Above average (4.0)

Personal Characteristics Scale - Superior (5.0)

Counselor's Evaluation - Trainee is pleasant, diligent, courteous, and very neat in attire. He works extremely well with others.

10. Brickmasonry "AA"

Age - 40 IQ - 90

Educational Level - 6th Grade

Married - Seven dependents

Occupational and Academic Scale - above average (4.0)

Personal Characteristics Scale - Superior (5.0)

Counselor's Evaluation - Trainee is conscientious, and pleasant. He is responsible, industrious, and self-confident.

Isolates

1. Meat Processing "A"

Age - 45 IQ - 95

Educational Level - 9th Grade

Married - Seven dependents

Occupational and Academic Scale - Average (2.9)

Personal Characteristics Scale - Above average (4.3)

Counselor's Evaluation - Quiet and cooperative. Neatly dressed. Appears interested. Job potential average.

NOTE: Employment history sporadic. Has changed jobs several times since termination of training.

2. Meat Processing "A"

Age - 25 IQ - 56

Educational Level - 12th Grade

Single

Occupational and Academic Scale - Average (2.7)

Personal Characteristics Scale - Above average (3.9)

Counselor's Evaluation - Personal appearance neat. Pleasant manner but has difficulty in relating to other trainees. Job potential should be average.

NOTE: Dismissal from job because of illness. Alleged to be involved in narcotics.

3. Meat Processing "A"

Age - 42 IQ - 87

Educational Level - 10th Grade

Divorced - Five dependents

Occupational and Academic Scale - Average (3.3)

Personal Characteristics Scale - Above average (4.5)

Counselor's Evaluation - Mature and cooperative. Is respected by but not accepted in "inner group" of fellow trainees. Personal appearance is very good. Job potential is average.

4. Meat Processing "A"

Age - 40 IQ - 83

Educational Level - 10th Grade

Married - Five dependents

Occupational and Academic Scale - Average (3.0)

Personal Characteristics Scale - Above average (4.0)

Counselor's Evaluation - Has made considerable progress since entering program. Cooperative and retiring. Personal appearance below average. Job potential average.

NOTE: Was convicted for armed robbery, several years prior to entering project. Has changed jobs several times since completing training.

5. Meat Processing "AA"

Age - 42 IQ - 74

Educational Level - 9th Grade

Married - Seven dependents

Occupational and Academic Scale - Below average (2.8)

Personal Characteristics Scale - Above average (4.4)

Counselor's Evaluation - Quiet manner, personal appearance is neat. Job potential below average in training area but if given opportunity to prove self may have average potential in unrelated area.

NOTE: Did not seek employment in training area. Work as nursing assistant has been above average to superior. At outset of training did not want to study meat processing. Was placed in area because there was space.

6. Meat Processing "AA"

Age - 44 IQ - 98

Educational Level - 6th Grade

Married - Ten dependents

Occupational and Academic Scale - Average (3.0)

Personal Characteristics Scale - Above average (4.1)

Counselor's Evaluation - Mature and cooperative. Appearance neat. Job potential average.

NOTE: Has four churches. Did not accept employment because of responsibilities as minister. Limited communication with project since completing training.

7. Meat Processing "AA"

Age - 25 IQ - 70

Educational Level - 7th Grade

Single

Occupational and Academic Scale - Average (3.3)

Personal Characteristics Scale - Above average (4.2)

Counselor's Evaluation - Retiring manner. Has made progress since entering program. Personal appearance good. Job potential is average if given opportunity to prove self.

8. Meat Processing "AA"

Age - 24 IQ - 91

Educational Level - 10th Grade

Married - Two dependents

Occupational and Academic Scale - Average (2.9)

Personal Characteristics Scale - Average (3.6)

Counselor's Evaluation - Quiet and cooperative. Has made progress since entering program. Appearance is neat. Job potential good if given opportunity to prove self.

NOTE: Attendance sporadic while in training - plagued with family problems (death of child) and brushes with the law. Relocated in New York City. Worked at a series of jobs of short duration.

9. Brickmasonry "A"

Age - 21 IQ - 89

Educational Level - 12th Grade

Single - One dependent

Occupational and Academic Scale - Average (3.0)

Personal Characteristics Scale - Above average (4.0)

Counselor's Evaluation - Trainee works enthusiastically at tasks. He is alert, well mannered and relates well with classmates. His joviality sometimes interfers with serious circumstances.

10. Brickmasonry "A"

Age - 37  IQ - 81

Educational Level - 8th Grade

Married - Eleven dependents

Occupational and Academic Scale - Above average (4.0)

Personal Characteristics Scale - Above average (4.0)

Counselor's Evaluation - Trainee seeks understanding in the activity at hand. He gets along well with group members. He is neat in appearance, cooperative, and well mannered.

11. Brickmasonry "AA"

Age - 21  IQ - 78

Educational Level - 7th Grade

Married - Two dependents

Occupational and Academic Scale - Below average (2.0)

Personal Characteristics Scale - Average (3.0)

Counselor's Evaluation - Trainee is cooperative and mild mannered. Interest is divided. Attention to trivia is high.

12. Brickmasonry "AA"

Age - 26  IQ - 74

Educational Level - 9th Grade

Married - Three dependents

Occupational and Academic Scale - Below average

Personal Characteristics Scale - Average (3.0)

Counselor's Evaluation - Trainee is courteous and well groomed. Full interest in task at hand is usually absent.

13. Brickmasonry "AA"

Age - 31 IQ - 97

Educational Level - 7th Grade

Married - Five dependents

Occupational and Academic Scale - Below average (2.0)

Personal Characteristics Scale - Average (3.0)

Counselor's Evaluation - Trainee is pleasant and polite. Exhilaration in work is exhibited in work if self-selected. Defeat in a task comes quickly.

14. Brickmasonry "AA"

Age - 44 IQ - 73

Educational Level - 5th Grade

Separated - One dependent

Occupational and Academic Scale - Below average (2.0)

Personal Characteristics Scale - Average (3.0)

Counselor's Evaluation - Trainee is quiet and well groomed. Eagerness to perform a task is not evident. Excuses are forefronted. "Clock watcher" describes behavior in order to pass time.

These vignettes further support a high correlation between the evaluations of peers and instructors. Out of twenty instructors' ratings of ten trainees identified as "Stars" by their peers, only two ratings were average. Of fourteen identified as "Isolates" by peers, only one was rated above average on the occupational and academic scale by instructors although nine were rated above average on the personal characteristics scale.

# CHAPTER VIII

# JOB DEVELOPMENT, PLACEMENT, AND FOLLOWUP

Activities involving job development began in October 1966. At that time the job development staff consisted of one member, a job developer. However, a post training counselor and another job developer joined the staff in August 1967.

The experiences from the previous E & D program proved helpful at all stages of the process of developing jobs, placement, and making followups.

The first steps in placement were to obtain information from the trainees concerning their plans with reference to employment. This information included names and addresses of employers whom they knew, and wanted the staff to contact. Generally, the other activities in job development included the following:

(1) Securing names and addresses of other employers.

(2) Contacting employers by personal visits and telephone.

(3) Visiting and conferring with other connected agencies.

(4) Planning for relocation.

Letters were sent to nursing homes, hospitals, public health agencies, construction firms, masonry firms, labor unions, retail stores, meat packing companies, and all businesses employing individuals in the areas of training provided by the project. These letters served as an introduction to the program and informed the employer that personnel from the project would contact him later. The letter included a copy of the training outline.

Even though employers were asked to respond to the letter, only a few did so. When visiting these businesses the employers referred to the letters and seemed to have had considerable knowledge of the program and the training.

While contacting employers, the job developer held regular group meetings with the trainees. Most of these groups met according to occupational area; other meetings were held with the entire group. General information concerning employment was imparted, and questions raised by the group were answered. Specifically, topics discussed included procedures for completing applications, the interview, working conditions, wages, relocation, attitudes, expectations of employers, and other topics which provided a general orientation to the world of work. These group meetings proved to be interesting, informative, and motivating.

Most of the trainees had little confidence that they would be hired after training was completed.

The Tuskegee Institute Labor Mobility Project had funds to relocate trainees interested in moving to other locations to work.

This project performed an important role in the placement process. Without its financial assistance it would have been almost impossible to place some of the trainees.

Several State Employment Security Agencies were consulted for suggestions and assistance in placement. Labor Union officials were contacted concerning possibilities of admitting eligible trainees to the respective unions. The staff was unsuccessful in this effort. All the trainees in meat processing were admitted into the meat cutters union; however, this transaction did not directly involve project personnel. The staff was successful in placing several trainees in New York with the assistance of the Amalgamated Meat Cutters Union.

In an attempt to develop jobs in locations selected by the trainees, data were collected; a questionnaire was used for this purpose (see Appendix). According to this data, a large number of the trainees who had earlier expressed interest in relocating in the large cities, no longer chose to do so. This indicated a considerable change in their attitudes. Efforts were made to locate jobs according to the choices of the trainees; however, they were encouraged to consider job opportunities within their residential areas before attempting to relocate some distance.

The job development officers found the most effective method of developing jobs to be a door to door campaign of all business employing individuals in the occupations in which training was provided. Many times the larger companies referred staff members to their subcontractors. All referrals were followed up. The local businesses were contacted first, and then the more distant ones as selected by the trainees. When an employer was contacted, a record of the interview was recorded on an employer contact form. A copy of this form is in the Appendix.

A personal data form which included ratings for academic and personal characteristics was completed and made available to the employer (see Appendix). This data was particularly useful to the employers hiring meat processors and nurse aide trainees. In most cases, they were the only trainees who were interviewed. When interviews were necessary, the job developer was responsible for the trainees being present. When a trainee was hired, the employer was asked to sign a form certifying employment (see Appendix). This form was used for referral purposes in addition to serving as a record of employment.

On the last day of training, most of the trainees who did not have prospective jobs were given names and addresses of employers to contact. When training was completed, contact with some of the trainees was lost, and it became difficult to locate them in their various rural communities. Most of the trainees had rural addresses, and no telephones.

A schedule was arranged so that those returning to the project office could contact the job developer at certain times. When placement was completed, the staff had visited the homes of nearly all of the trainees at least once.

During the first two or three weeks after training was completed, many of the trainees exhibited a negative attitude concerning employment. They were not as eager to work as they were earlier. Some of the hesitance may be attributed to the fact that many had fallen behind on various chores at home. Some of them needed vacations, others were a little reluctant to try their newly acquired skills.

However, as time passed trainees became interested in employment, but there were a few who were not interested in working at all. Some of those in this group were farmers, and returned to their previous occupation--farming. In these cases, the staff had to constantly encourage them to accept the jobs available in their area of training. Perhaps the reasons for this type of attitude was caused by fear and a lack of confidence.

In the following section, the job development and placement aspects of each group will be dealt with according to the respective occupational areas.

## Nurse Aides

The nurse aides were the first group of trainees to graduate;

therefore, they were the first to be involved in the above activities. There were two classes of nurse aide trainees with sixteen in each, but they were not conducted concurrently. Many of the individual trainees were in similar situations. These factors increased the difficulty involved in placement.

When consulting the various agencies employing nurse aides, it was discovered that jobs were difficult to find, especially in the local areas. The employment turnover rate was low in hospitals and nursing homes. New regulations on standard wages were causing employers to release nurse aides in order to comply with these regulations. In general, the outlook for nurse aides in the local areas was not favorable. Consequently, the nurse aides in these areas had to accept non-training related jobs, commute to other towns, or relocate in order to become employed. However, the larger portion of the trainees accepted jobs in their area of training as represented in Table XLVI. Others who had no means of transportation waited for a job to develop closer to their residence.

There were jobs available for the nurse aides who could relocate. These jobs were secured by telephone and other correspondence. On a few occasions, it was necessary for the job developer to travel out of the state to place trainees.

Nurse aides in the second class found employment opportunities less numerous than those in the first group. However, initial contact with employers was established, and when jobs became available, the trainees were placed immediately. Occasionally, employers called the project seeking nurse aide trainees.

Eventually, all nurse aide trainees were employed with the exception of two. Jobs were developed for these two, but due to various problems at that time, they could not accept. The following table reflects the employment status of the two classes of nurse aides:

TABLE XLVI

EMPLOYMENT STATUS - NURSE AIDE TRAINEES

| Description | Initially N=32 | Currently N=28 |
|---|---|---|
| Number Employed | 30 | 21 |
| Training Related | 25 | 17 |
| Non-Training Related | 5 | 4 |
| In the State | 24 | 27 |
| Out of the State | 6 | 1 |
| Self-Employed | 0 | 0 |
| Training Related | 0 | 0 |
| Non-Training Related | 0 | 0 |
| Unemployed | 2 | 7 |
| Unable to Locate | 0 | 4 |

## Carpentry

The same methods utilized in developing jobs for nurse aides were followed in placing the other trainees. The staff learned that the hiring of mechanics was done at the job site and not in the construction company's offices. Neither are they hired by writing letters to these companies. Many companies do not hire men as carpenter helpers or apprentice carpenters. They work as either a journeyman or as a laborer. The staff was also informed by these companies that they had no training programs and could not use inexperienced mechanics. They stated that it was cheaper to hire an experienced man even though they had to pay him more.

Some of the carpentry trainees engaged in contracting small jobs themselves. One trainee in this area hired several of his classmates.

As illustrated in Table XLVII, the carpenters maintained a consistent pattern of employment six months after completing the training program.

TABLE XLVII

EMPLOYMENT STATUS - CARPENTRY TRAINEES

| Description | Initially N=29 | Currently N=27 |
|---|---|---|
| Number Employed | 27 | 24 |
| Training Related | 16 | 16 |
| Non-Training Related | 7 | 8 |
| In the State | 23 | 21 |
| Out of the State | 4 | 3 |
| Self-Employed | 4 | 3 |
| Training Related | 3 | 3 |
| Non-Training Related | 1 | 0 |
| Unemployed | 1 | 3 |
| Unable to Locate | 0 | 2 |

## Brickmasonry

The trainees in brickmasonry were confronted with problems somewhat different from those found in other areas. One factor was that brickmasonry is an occupation which requires a considerable amount of mobility and changing of jobs; another is that mistakes in craftsmanship are more costly than in other occupations. Therefore, it is a difficult occupation for inexperienced mechanics to enter. Employers were primarily interested in hiring experienced craftsmen. Very few, if any, exceptions were made for the trainees once they were hired.

They were expected to work as rapidly and with as much perfection as the journeymen, but were paid considerably less. Many of the trainees accepted jobs for less than the going rates in order to gain experience on a commercial job.

During the early stages of job placement, the masonry trainees as a group were reluctant to accept jobs. They seemed to have been waiting to see how successful some of the others were going to be. There was a considerable amount of fear involved in accepting the first job. When they were hired, their employers were not concerned with the trainees' problems or handicaps; they either performed satisfactorily, or they were dismissed immediately. Nevertheless, brickmasonry was the second strongest area of employment. All brickmasonry trainees were hired on at least one job. Several were placed as many as four times. The fast turnover rate may be attributed to the lack of experience on the part of the trainees and to the particular characteristics of the occupation. Several trainees were fired from their first jobs because they misrepresented themselves and were hired as journeymen bricklayers.

On a collective basis, the brickmasons maintained a high rate of employment even during the "off" season, as Table XLVIII illustrates.

TABLE XLVIII

EMPLOYMENT OF BRICKMASONRY TRAINEES

| Description | Initially N=29 | Six-Months N=27 |
|---|---|---|
| Number Employed | 29 | 23 |
| Training Related | 27 | 16 |
| Non-Training Related | 2 | 7 |
| In the State | 17 | 17 |
| Out of the State | 12 | 6 |
| Self-Employed | 0 | 1 |
| Training Related | 0 | 1 |
| Non-Training Related | 0 | 0 |
| Unemployed | 0 | 4 |
| Unable to Locate | 0 | 2 |

### Meat Processing

Job prospects for the meat processors were excellent from the beginning. The trainees who had completed high school, and those who passed the General Educational Development Test were actually in demand.

Experiences with the retail stores were very rewarding. Many of the company representatives responded to correspondence from the project, and some came to the campus for on-site visits; a few of them came several times. Near the end of training, schedules were arranged so that each company could interview and test the trainees.

The personnel officers and other representatives visiting the project's facilities were impressed with the trainees, instructors, and the meat processing program. Several of them indicated that programs of this nature could serve as an excellent source for future employees.

At the completion of the training, nearly all meat processors were promised jobs. The number of available jobs actually exceeded the number of trainees to be placed. However, Table XXIX reveals that six months after training, employment in meat processing had changed considerably.

TABLE XXIX

EMPLOYMENT OF MEAT PROCESSING TRAINEES

| Description | Initially N=26 | Six-Months N=18 |
|---|---|---|
| Number Employed | 25 | 14 |
| Training Related | 17 | 9 |
| Non-Training Related | 8 | 5 |
| In the State | 16 | 9 |
| Out of the State | 9 | 5 |
| Self-Employed | 1 | 1 |
| Training Related | 0 | 0 |
| Non-Training Related | 1 | 1 |
| Unemployed | 0 | 4 |
| Unable to Locate | 0 | 8 |

## Overview of Job Development and Placement

The job development staff attempted to place or assist in placing all the trainees. Some needed and received more attention than others. Many of them had definite plans of their own and found jobs themselves, while others became very dependent upon the staff.

An attempt was made to determine the number of trainees placed by the project and those who placed themselves. All trainees who were accompanied or sent to a job are classified as being placed. Those who received no assistance from the staff in obtaining a particular job were classified as having placed themselves.

The trainees employed by firms whom a staff member had contacted are classified as being assisted in being employed. Table L depicts the placements, self-placements and assists in each occupational area. However, much time was spent in attempting to place trainees who found jobs themselves.

## TABLE L

## PLACEMENT STATUS MDT TRAINEES (N=116)

| Trade Areas | Placements | Self-Placements | Assists | Totals |
|---|---|---|---|---|
| Brickmasonry | 18 | 8 | 3 | 29 |
| Carpentry | 10 | 16 | 1 | 27 |
| Meat Processing | 19 | 6 | 1 | 26 |
| Nurse Aide | 23 | 4 | 3 | 30 |
| Total | 70 | 34 | 8 | 112 |

When activities in job development and placement were concluded, 112, or 97 percent, of the trainees had been employed. Seventy-one percent of them were employed within the state, in or near their home towns.

### Wages

The trainees as a group had a desirable attitude concerning wages. This subject was discussed thoroughly on many occasions during training. They seemed to have decided that a job in their area of training was more important than how much they were going to be paid. However, the staff always pressed for satisfactory wages. The trainees were encouraged to ask their employers for increases in wages when they deserved it.

The wage which the staff considered as fair was based upon the rates which journeymen in the same occupations were receiving. Employers were asked to consider starting the trainees at a minimum hourly rate of 60 percent of a journeyman's wage. These rates applied primarily to trainees in brickmasonry and carpentry. According to Table LI, the average hourly wage received by these trainees was lower than the established rate

TABLE LI

AVERAGE HOURLY WAGE PAID TRAINEES ON FIRST JOB

| Trade Area | Wages |
|---|---|
| Brickmasonry | $2.10 |
| Carpentry | 1.88 |
| Meat Processing | 1.81 |
| Nurse Aide | 1.23 |

The trainees' wages increased as they gained experience. According to a recent survey, several of the trainees are receiving maximum wages with only one year of experience.

## On-The-Job Training

Although the prime contract provided for the placement of 50 trainees in OJT situations at the end of their training at Tuskegee Institute, due to varying problems only 13 were thus placed. These problems included a delay in approval of the OJT aspect of the program, and a lack of interest on the part of employers. Many of the slots were not filled because the majority of the trainees went into "straight" employment at the entry level.

It should be noted that many contacts had been made prior to clearance. More than 70 employers were contacted personally, and many others were reached by mail and telephone.

The wages for trainees placed in OJT, in most cases, were lower than those who were not placed thus. It seems that employers were more inclined to pay lower wages to those involved in a structured training situation than to those who were not.

The subcontractors who became involved in OJT were, in most cases, small businessmen. The larger companies were not interested. In many instances, they did not want to employ inexperienced workers under any circumstances. Others preferred not to get involved in legal matters concerning the execution of contracts. Therefore, the smaller contractor became the prime target. Many of them employed only a small number of persons, and contracted only small jobs. These contractors were in a position to hire and train inexperienced men.

Another factor which limited the success in OJT was that it was confined to only two occupations--carpentry and brickmasonry with neither being very stable. All the meat processors employed in their area of training were employed by large retail stores. These stores provided OJT within their systems.

Several contractors located in Atlanta, Georgia, agreed to provide OJT for a number of the trainees. A clearance to proceed with the program was obtained from the Georgia State Employment Service, but problems arose with the Bureau of Apprenticeship and Training, and these men were not placed in OJT. However, a large number of trainees were placed in regular employment in the Atlanta area.

Procedures for reimbursing OJT subcontractors were devised. All subcontractors were paid according to the number of hours in which they provided training. The only major problem involved in OJT with the subcontractors was irregular employment, a circumstance which sometimes allowed the trainees to work two or three days a week. As illustrated in Table LII, less than half of those who began training in OJT situations, completed it.

### TABLE LII

### OJT CONTRACTS

| No. of Contracts | Trainees Involved | Training Completed | Total Training Hours | No. Employed After OJT |
|---|---|---|---|---|
| 1 | 5 | 3 | 1,936.5 | 3 |
| 2 | 2 | 1 | 824 | 1 |
| 3 | 1 | 1 | 688 | 0 |
| 4 | 3 | 0 | 288 | 0 |
| 5 | 2 | 2 | 840 | 1 |
| 5 | 13 | 7 | 4,576.5 | 5 |

## Follow-Up Interviews

In January 1968, the job development staff terminated duties in placement and engaged in an in-depth follow-up study. The objective was to locate the trainees and their employers within a reasonable distance and to conduct personal interviews concerning employment success. Most trainees and employers located out of the state were mailed special forms to be completed and returned.

Approximately 84 percent of the trainees were located and interviewed, as indicated in Table LIII.

## TABLE LIII

## TRAINEES LOCATED FOR IN-DEPTH FOLLOW-UP INTERVIEWS

| Occupational Areas | Number | Percent |
|---|---|---|
| Carpentry | 24 | 83 |
| Brickmasonry | 27 | 93 |
| Meat Processing | 18 | 69 |
| Nurse Aide | 28 | 88 |
| Total | 97 | 84 |

Table LIV gives data on interviews of employers. In a few cases, more than one employer was interviewed concerning a particular trainee.

## TABLE LIV

## EMPLOYERS' IN-DEPTH FOLLOW-UP INTERVIEWS

| Occupational Areas | Number | Percent |
|---|---|---|
| Carpentry | 15 | 52 |
| Brickmasonry | 25 | 86 |
| Meat Processing | 12 | 46 |
| Nurse Aide | 21 | 66 |
| Total | 73 | 63 |

### Job Performance

Relationships of Job Performance to Training Performance and to In-Put Characteristics may be described for male trainees. (Comparable data for Nurses Aide Trainees is not available). The following discussion describes the characteristics of the 84 male trainees who completed training, the 17 who were not located at the time the analysis was undertaken (two additional carpentry trainees were located later and appeared in the foregoing totals), and the 67 trainees for whom complete interview data is available.

There were 17 trainees who completed training and were placed on jobs who were not found for interviewing in the follow-up survey. Examination of the records of these seventeen trainees provided the following description of them.

### TABLE LV

### CHARACTERISTICS OF TRAINEES NOT INCLUDED IN FOLLOW-UP SURVEY

| Characteristics | Percent |
|---|---|
| Age | |
| Under 30 | 41 |
| 30 - 39 | 24 |
| 40 and over | 35 |
| IQ Rating | |
| Average | 24 |
| Below average | 52 |
| Inferior or Defective | 24 |
| Technical Training Area | |
| Carpentry | 29 |
| Brickmasonry | 24 |
| Meat Processing | 47 |
| Literacy Level | |
| "A" | 35 |
| "AA" | 65 |

Representation in the "Not Included" group of the under 30 and over 40 trainees was greater than their representation in the trainee population while the 30 - 39 age group was under-represented. Nearly two-thirds of those "not included" were in the lower-literacy ("AA") group. The average IQ group was under-represented, and the below-average and inferior IQ group were over-represented. In terms of the skills training area, the meat processing trainees were over-represented.

The former trainees included in the follow-up survey were of the following training identification:

TABLE LVI

ACADEMIC GROUPING AND TECHNICAL TRAINING AREA OF TRAINEES IN FOLLOW-UP SURVEY

| Academic Grouping | Brickmasonry | Carpentry | Meat Processing | Total |
|---|---|---|---|---|
| "A" | 12 | 13 | 10 | 35 |
| "AA" | 12 | 12 | 8 | 32 |
| Total | 24 | 25 | 18 | 67 |

The employment histories of this group reported that all of the trainees had been employed following training. The number of jobs on which they had been employed were:

## TABLE LVII

## NUMBER OF JOBS HELD BY TRAINEES IN FIRST SIX MONTHS FOLLOWING COMPLETION OF TRAINING

| Job | Number | Percent |
|---|---|---|
| One job | 30 | 44.8 |
| Two jobs | 20 | 29.9 |
| Three jobs | 10 | 14.9 |
| Four jobs | 7 | 10.4 |

When considered in terms of vocational skills training area, initial employment as a result of the project job placement service, sixty-two were placed in jobs for which they had been trained. Five took employment unrelated to their training--two from carpentry, and three from meat processing.

Fifty-six first-job employers of these trainees were located. Fifteen each of the carpenters and meat processors, and sixteen of the brickmasons were reported as having done satisfactory work. Five carpenters and five brickmasons were reported as having done unsatisfactory work. No meat processors were reported as having done unsatisfactory work.

## TABLE LVIII

## REPORT ON SECOND JOB EMPLOYMENT

| | Brickmasonry | Carpentry | Meat Processing |
|---|---|---|---|
| Number reporting second jobs | 19 | 13 | 5 |
| Job unrelated to training | 4 | 3 | 2 |
| Satisfactory performance | 9 | 8 | 2 |
| Unsatisfactory performance | 4 | 0 | 1 |
| No employer report | 6 | 5 | 2 |

## TABLE LIX

## HOURLY WAGES ON FIRST AND SECOND JOBS

| Hourly Wages | Brickmasonry | | Vocational Skills<br>Carpentry | | Meat Processing | |
|---|---|---|---|---|---|---|
| | First | Second | First | Second | First | Second |
| Not given | -- | -- | 1 | -- | -- | -- |
| Less than $1.00 | -- | -- | 1 | -- | -- | -- |
| $1.00 - $1.99 | 7 | 6 | 16 | 10 | 6 | 4 |
| $2.00 - $2.99 | 17 | 12 | 6 | 1 | 11 | 1 |
| $3.00 - $3.99 | -- | -- | 1 | 2 | 1 | -- |
| Total | 24 | 18 | 25 | 13 | 18 | 5 |

A relationship between satisfactory performance and length of time on the job may be expected. The following shows what the relationship was:

TABLE LX

LENGTH OF TIME EMPLOYED ON FIRST JOB AND PERFORMANCE ON JOB

| Length of time on First Job | Performance on First Job | | |
|---|---|---|---|
| | Not Given | Satisfactory | Unsatisfactory |
| Not given | -- | 3 | 1 |
| Less than 1 month | 3 | 3 | 4 |
| 1 - 2 months | -- | 7 | 4 |
| 3 - 4 months | 2 | 4 | 1 |
| 5 months or more | 2 | 29 | 0 |

The economic impact on those who completed the training may be measured by comparison of employment status and earnings as reported in the intake interview at the beginning of training and by the six-months afterward survey.

## TABLE LXI

## EARNINGS OF TRAINEES BEFORE AND SIX MONTHS AFTER TRAINING

| Employment and Weekly Earnings | Before Training | Six-Months After Training |
|---|---|---|
| Farmers | 11 | -- |
| Unemployed | 23 | 11 |
| $20 or less | 3 | 1 |
| $21 - $39 | 6 | -- |
| $40 - $59 | 16 | 3 |
| $60 - $79 | 8 | 22 |
| $80 - $99 | -- | 13 |
| $100 - $139 | -- | 13 |
| $140 - and above | -- | 4 |
| Total | 67 | 67 |

The 34 male trainees who reported earnings in the intake interview had average weekly earnings of $47.48 with a range from less than $20 per week to $79 per week. In the survey 56 male trainees reported earnings that averaged $85.92 per week with a range, excepting one case, from $40 to $170 weekly.

The overall picture is one that demonstrates the improvement that MDTA type training can bring in the economic status of the disadvantaged adult, but there are questions that arise that need attention.

1. How to account for those unemployed at the time of the survey?
2. What does the 55 percent of trainees who had more than one job in six months mean?
3. What indicators were there during the training experience of success or lack of success in on-the-job performance?

The trainees were grouped for instruction into two categories: "A"--those with higher than eighth grade equivalency and "AA"--those with less than eighth grade equivalency. In Chapter VII the gross differences between the two groups were discussed and their response to training was described. It was found that there was no significant relationship between literacy level and Revised Beta IQ scores. We now give attention to any relationships between the "A" group and the "AA" group in job performance subsequent to training.

The 67 former trainees who were interviewed in the follow-up survey were divided--35 in the "A" group and 32 in the "AA" group. Employer reports on trainees in jobs were secured with the following results:

## TABLE LXII

## EMPLOYERS' APPROVAL OF TRAINEES WORK ACCORDING TO JOB AND LITERACY GROUPING DURING TRAINING

| | "A" | | | "AA" | | |
|---|---|---|---|---|---|---|
| | 1st Job | 2nd Job | 3rd Job | 1st Job | 2nd Job | 3rd Job |
| Not given | 7 | 3 | 3 | 4 | 0 | 6 |
| Satisfactory | 25 | 10 | 4 | 21 | 9 | 4 |
| Unsatisfactory | 3 | 4 | 0 | 7 | 1 | 0 |
| Total | 35 | 17 | 7 | 32 | 20 | 10 |

## TABLE LXIII

## HOURLY WAGES OF TRAINEES ACCORDING TO JOB AND LITERACY GROUPING DURING TRAINING

| | "A" | | | "AA" | | |
|---|---|---|---|---|---|---|
| | 1st Job | 2nd Job | 3rd Job | 1st Job | 2nd Job | 3rd Job |
| $1.00 - $1.99 | 1 | 6 | 3 | 0 | 14 | 2 |
| $2.00 - $2.99 | 12 | 8 | 2 | 17 | 6 | 6 |
| $3.00 and over | 22 | 2 | 2 | 14 | 0 | 2 |
| Not given | 0 | 1 | 0 | 1 | 0 | 0 |
| Total | 35 | 17 | 7 | 32 | 20 | 10 |

## TABLE LXIV

## NUMBER OF JOBS HELD ACCORDING TO LITERACY GROUPING DURING TRAINING

| Number of Jobs | "A" Group | "AA" Group |
|---|---|---|
| One | 18 | 12 |
| Two | 10 | 10 |
| Three or more | 7 | 10 |
| Total | 35 | 32 |

## TABLE LXV

## LENGTH OF TIME WORKED ON FIRST JOB ACCORDING TO LITERACY GROUPING DURING TRAINING

| | Group | |
|---|---|---|
| | "A" | "AA" |
| Not given | 2 | 2 |
| Less than one month | 3 | 7 |
| One to four months | 11 | 11 |
| Five months or more | 19 | 12 |
| Total | 35 | 32 |

Twenty-seven percent of Group "A" trainees held one job for six months following training while 18 percent of Group "AA" remained on the first job. Eleven percent of Group "A" and 15 percent of Group "AA" had three or more jobs in that period of time.

Ten of Group "A" and 16 of Group "AA" trainees worked at some time for less than two dollars per hour. Twenty-six of Group "A" and sixteen of Group "AA" worked for $3.00 or more per hour.

Fourteen employers of Group "A" trainees and seventeen employers of Group "AA" trainees had suggestions as follows about trainees as their employees:

TABLE LXVI

EMPLOYERS' SUGGESTIONS ABOUT TRAINING OF EMPLOYEES ACCORDING TO LITERACY GROUPING DURING TRAINING

| | Group "A" | Group "AA" | Total |
|---|---|---|---|
| More practical experience | 6 | 4 | 10 |
| Better selection of trainees | 3 | 9 | 12 |
| Specific skills need to be taught | 4 | 3 | 7 |
| Need to develop speed | 1 | 1 | 2 |
| Total | 14 | 17 | 31 |

The trainees' evaluation of their training and work experience was sought through asking the questions that follow. The responses to these questions are given also.

TABLE LXVII

TRAINEES EVALUATION OF THEIR TRAINING AND WORK EXPERIENCE

| | Questions | Undecided or Not Given | Percent Yes | Percent No |
|---|---|---|---|---|
| 1. | Are you satisfied with present job? | 16 | 75 | 9 |
| 2. | Was training sufficient for job? | -- | 92 | 8 |
| 3. | Has basic education helped on the job? | 2 | 98 | -- |

| | | Percent |
|---|---|---|
| 4. | What was the most beneficial part of training? | |
| | Not given | 5 |
| | Everything | 19 |
| | Technical Skill | 40 |
| | Technical Skill and Math | 13 |
| | Technical Skill and English | 3 |
| | Technical Skill, English and Math | 12 |
| | Counseling | 5 |
| | On-the-Job Training | 3 |
| | | 100 |
| 5. | What in your training was unnecessary? | |
| | Not given | 5 |
| | Counseling | 3 |
| | Related Activities | 28 |
| | Testing | 3 |
| | Basic Education | 5 |
| | Nothing | 56 |
| | | 100 |

TABLE LXVII (Continued)

TRAINEES EVALUATION OF THEIR TRAINING AND WORK EXPERIENCE

| Questions | | Percent |
|---|---|---|
| 6. | What was your reason for leaving the first job? | |
| | Not given | 0 |
| | Work ended or laid off | 33 |
| | Health problem | 6 |
| | Irregular work | 10 |
| | Didn't like employer or fellow employees | 3 |
| | Transportation problem | 1 |
| | Wages too low | |
| | Found better job | 8 |
| | working on first job | 34 |
| | | 100 |

Of special interest are the eleven trainees among the 67 who were reported unemployed at the time of the survey. Four of them were meat processing trainees, three were carpentry trainees, and four were brickmasonry trainees.

## TABLE LXVIII

## DESCRIPTION OF TRAINEES FOUND UNEMPLOYED IN FOLLOW-UP SURVEY

| Literacy Group | Teachers Evaluation Technical Skill | Teachers Evaluation Personal Characteristic | Peer Identification | Reasons given for Unemployment |
|---|---|---|---|---|
| Brickmasonry | | | | |
| 1 A | Average | Average | Acceptable | Work was irregular |
| 2 A | Below Average | Average | Isolate | Unable to work because of weather |
| 3 AA | Below Average | Average | Isolate | Completed first job; laid off second job |
| 4 A | Below Average | Average | Isolate | Laid off first job; Second job completed |
| Carpentry | | | | |
| 1 AA | Below Average | Average | Isolate | Health not good; Worked two weeks on first job; None since |
| 2 AA | Below Average | Average | Isolate | Completed job; not called again |
| 3 A | Average | Average | Isolate | Employer could not provide full time employment |

## TABLE LXVIII (Continued)

## DESCRIPTION OF TRAINEES FOUND UNEMPLOYED IN FOLLOW-UP SURVEY

| Literacy Group | Teachers Evaluation Technical Skill | Teachers Evaluation Personal Characteristic | Peer Identification | Reasons given for Unemployment |
|---|---|---|---|---|
| Meat Processing | | | | |
| 1 A | Average | Above Average | Isolate | Employment on job not training-related and quit |
| 2 A | Average | Above Average | Acceptable | Has disability retirement. Worked in a person's place who returned; may work again . |
| 3 A | Below Average | Above Average | Isolate | Left first job because of illness. Left second job because would not let cut meat |
| 4 A | Above Average | Above Average | Star | June to January apprenticeship. Manager let him go. Manager says he was willing and worked hard but lacked minimum speed. |

Work in the construction trades is seasonal and uncertain and the carpenter or brickmason with limited training has difficulty in competing for the jobs available. It is interesting to note that in terms of literacy level eight belonged to the "A" group and three to the "AA" group. According to the teachers' evaluation, all were average or above average on the personal characteristics scale while seven were below average and four were average on the technical skill scale. A most interesting fact is that peer ratings on the socio-metric scale placed eight of them in the isolate category, two in the acceptable category and one was in the star category. The suggestion of peer evaluation as an indicator of job performance is an intriguing one.

The crucial question the follow-up survey sought an answer for was employers' satisfaction with the work of the trainees they had hired. Employers were asked to rate an employee simply as "Satisfactory" or "Unsatisfactory" with the following result:

| | |
|---|---|
| Satisfactory | 46 |
| Unsatisfactory | 10 |

The next question to be asked is "What indicators observed in the training experience are related to satisfactory job performance?" Relationships between satisfactory job performance and the following factors were examined:

1. IQ Rating
2. Literacy Level

3. Work Interest
4. Emotional Adjustment
5. Teachers Evaluation
6. Peer Evaluation

The results of examination of trainees' records for relationships are given below:

### TABLE LXIX

### RELATION OF SATISFACTION OF JOB PERFORMANCE AND SELECTED CHARACTERISTICS OF EMPLOYED TRAINEES

| | | Number: 46 Satisfactory | Number: 10 Unsatisfactory |
|---|---|---|---|
| 1. | IQ Rating | | |
| | 90 - 109 Average | 23 | 3 |
| | 81 - 89 Below Average | 8 | 2 |
| | 71 - 80 Inferior | 10 | 4 |
| | 70 and below Defective | 5 | 1 |
| 2. | Literacy Category | | |
| | Below 6th grade | 20 | 5 |
| | 6 - 8 grade | 21 | 5 |
| | 9th grade or above | 5 | - |
| 3. | Work Interest | | |
| | High | 15 | 5 |
| | Low | 31 | 5 |
| 4. | Emotional Adjustment | | |
| | Poor | 25 | 5 |
| | Good | 21 | 5. |

## TABLE LXIX (Continued)

## RELATION OF SATISFACTION OF JOB PERFORMANCE AND SELECTED CHARACTERISTICS OF EMPLOYED TRAINEES

| | | Number: 46 Satisfactory | Number: 10 Unsatisfactory |
|---|---|---|---|
| 5A. | Teachers' Evaluation Course Performance | | |
| | High | 32 | 2 |
| | Low | 14 | 8 |
| 5B. | Teachers' Evaluation Personal Characteristics | | |
| | High | 41 | 6 |
| | Low | 5 | 4 |
| 6. | Peer Evaluation | | |
| | Star | 9 | 2 |
| | Highly Acceptable | 17 | 1 |
| | Acceptable | 16 | 5 |
| | Isolate | 4 | 2 |

# CHAPTER IX

## ANALYSIS AND CONCLUSIONS

The training program described in this report was designed and carried out on the basis of several assumptions that may be stated as theoretical and operational hypotheses. Tests of the hypotheses were made by using indicators of the degree of successful performance on the part of trainees in their courses of instruction, and through indicators of the degree of successful job performance in employment in which they have been engaged since the completion of their training.

The scope of the study of the degree of success in training and in job performance included what characteristics of the persons taking training influenced their success. Another consideration was how the training matrix encouraged or discouraged the trainees. The basic concern in undertaking this training project was to answer the question: Can a training course prepare low literacy unskilled adults for entry level employment at selected skills in a 12-month period of instruction?

Appraisal of the effectiveness of the training given in this project involves consideration of many qualitative variables, but a small population. The analysis requires use of appropriate measures of relationship between qualitative variables.

The varibles considered are:

1. Interest, aptitudes, intellectual development, and emotional adjustment as predisposing factors or antecedent variables.
2. Performance of the trainee in training and performance on the job following training as the dependent variables.
3. Counseling and class instruction during training as intervening variables.

Determination of the quality of these variables requires indicators that are imprecise at best, and of dubious worth at worst. Report on results of some indicators used, find them to be "not applicable" for the use to which they were put. In the analysis of relationships between variables, the experimental rather than the demonstration character of the project will be emphasized.

## Hypotheses - Theoretical

A. Psychological and social attributes of the adult trainee will influence the degree of success he achieves in training and in employment.

B. Successful occupational training depends upon the level of basic education of the trainee.

C. Adults who lack marketable vocational skills can be given sufficient technical information about a skill, and develop adequate use of fundamental techniques in use of the skill, in a 12-month period of training to equip them with essential occupational know-how for entry employment at the skill.

## Null Hypotheses - Operational

1. Scores on a battery of psychological tests have no relation to scores on tests evaluating performance in training.

2. There is no significant difference in terms of emotional adjustment and performance in training.
3. There is no significant difference in terms of performance in technical skills training between trainees with some elementary school education, and those with some high school education.
4. There is no significant difference in terms of performance level of trainees in technical skills instruction and in basic education classes.
5. There is no significant difference in terms of instructors' evaluation of training performance and employers' evaluation of job performance.
6. Peer evaluations are not useful as indicators of satisfactory job performance.

A. PSYCHOLOGICAL AND SOCIAL ATTRIBUTES OF THE ADULT TRAINEE WILL INFLUENCE THE DEGREE OF SUCCESS HE ACHIEVES IN TRAINING.

1. Scores on a battery of psychological tests have no relation to scores on tests evaluating performance in training.

Interest. A first concern expressed is the kind of interest the trainee had in the skill for which he was trained.

The technical skills training areas were decided upon and persons were invited to take the training. Thus choice was initially limited.

Within the choice limitations, there was restriction on selection of alternatives. Establishments that employ meat processors do not employ older men. Consequently, younger applicants for training were directed into meat processing classes.

Limitations placed on the size of training groups resulted in division of older men, as nearly as practicable, on the basis of their choice between carpentry and brickmasonry.

On the basis of three work interest indicators reported on in the discussion of Input Characteristics, the trainees as a group had no focused or concentrated work interest. They showed lowest interest in mechanical occupations. Only two trainees indicated carpentry to be their highest vocational interest while 30 were to be assigned to training in carpentry. The trainees preferred indoor to outdoor, white collar to blue collar, and clean to dirty hands pursuits.

The results of these psychological tests appear to be consistent with the work history of the trainees. Their employment records showed that they had worked on several jobs, apparently whatever jobs they could get, since only 18 percent reported that the jobs they had been employed on had been highly related.

From counseling interviews, there is corroborative evidence that the trainees wanted to "do better", "make more money", "improve living conditions" without any great concern about the skills.

The following contingency tables show the relationship between scores on the Work Interest Index given at entry to the training program and the composite instructors' evaluation of the performance in training at conclusion of training.

For these qualitative measures and small numbers, the calculation of chi square is sufficient to indicate the existence or absence of significant relationship without straining to establish a degree of relationship under the circumstances. The relationship between the Work Interest Flexibility score, and the Instructors' Exit Evaluation score is considered significant, while the relationship between the aspiration level scores and Instructors' Exit Evaluation scores are considered not to be significant.

It may be concluded that:

> The trainees entered training without great interest in the skills for which they were to be trained.

Aptitudes. In some learning theory aptitudes are classified as intervening variables. For our purposes, we chose to consider them as antecedent variables because trainees were enrolled in training and assigned to a training group without a test of aptitudes. The tests of aptitudes were given before training began, but were not used to place trainees. Our interest here is to determine whether or not aptitude test scores have a relationship to evaluation of training performance scores.

The two tests used, Intuitive Mechanics Test and Mechanical Movements Test were considered by the psychologist as instruments that would come nearest to giving indication of the aptitudes of our trainees. Results obtained showed trainees scoring in the "Low" and

## TABLE LXX

## WORK INTEREST FLEXIBILITY SCORES AND INSTRUCTORS' EXIT EVALUATIONS

| Work Interest Flexibility Score | Instructors' Exit Evaluation of Trainee Performance | | | |
|---|---|---|---|---|
| | Below Average | Average | Above Average | Total |
| Low | 0 | 0 | 0 | 0 |
| Average | 4 | 21 | 28 | 53 |
| High | 2 | 12 | 17 | 31 |
| Total | 6 | 33 | 45 | 84 |

$X^2 = 6.55$

## TABLE LXXI

## WORK INTEREST ASPIRATION SCORES AND INTRUCTORS' EXIT EVALUATION

| Work Interest Aspiration Level Score | Instructors' Exit Evaluation of Trainee Performance | | | |
|---|---|---|---|---|
| | Below Average | Average | Above Average | Total |
| Low | 0 | 4 | 4 | 8 |
| Average | 6 | 28 | 41 | 75 |
| High | 0 | 1 | 0 | 1 |
| Total | 6 | 33 | 45 | 84 |

$X^2 = 2.88$

"Average" categories on both tests. Despite doubt about these tests having any usefulness for our purposes, we did examine the relationship between trainees' scores on them and instructors' evaluation scores on trainee performance.

### TABLE LXXII

### MECHANICAL MOVEMENTS TEST SCORES AND INSTRUCTORS' EXIT EVALUATIONS

| Mechanical Movements Test Score | Instructors' Exit Evaluation of Trainee Performance | | | |
|---|---|---|---|---|
| | Below Average | Average | Above Average | Total |
| Low | 3 | 18 | 12 | 33 |
| Average | 4 | 19 | 33 | 56 |
| High | 0 | 0 | 0 | 0 |
| Total | 7 | 37 | 45 | 89 |

$X^2 = 3.16$

## TABLE LXXIII

## INTUITIVE MECHANICS TEST SCORES AND INSTRUCTORS' EXIT EVALUATIONS

| Intuitive Mechanics Test Score | Instructors' Exit Evaluation of Trainee Performance | | | |
|---|---|---|---|---|
| | Below Average | Average | Above Average | Total |
| Low | 1 | 31 | 19 | 51 |
| Average | 4 | 0 | 34 | 38 |
| High | 0 | 0 | 0 | 0 |
| Total | 5 | 31 | 53 | 89 |

$X^2 = 36.01$

The relationship between performance and the Intuitive Mechanics Test is considered significant while the relationship between performance and the Mechanical Movements Test is not considered significant.

We may conclude that:

> No acceptable measure of aptitude of trainees for the skills for which they were trained were used. Aptitudes for this group of trainees was not determined.

Intellectual Development. With evidence of lack of focused interest on the part of trainees when they entered the program, and no evidence of aptitudes for the training they were given, general intellectual development became the third antecedent variable to be considered.

The indicators of intellectual development that were used are:

Revised Beta Examination to determine IQ

Non-Verbal Reasoning Test

Verbal Reasoning Test

Perceptual Abilities

Closure Flexibility

Closure Speed

Perceptual Speed

Rationale for the use of the Revised Beta Examination has been repeated several times in this report. We come now to observe the relationship between scores on this test and instructors' evaluation scores which is significant.

TABLE LXXIV

REVISED BETA EXAMINATION SCORES AND INSTRUCTORS' EXIT EVALUATIONS

| Revised Beta Examination Scores | Instructors' Exit Evaluation of Trainee Performance | | | |
|---|---|---|---|---|
| | Below Average | Average | Above Average | Total |
| Inferior or Defective | 3 | 16 | 4 | 23 |
| Below Average | 2 | 12 | 16 | 30 |
| Average | 2 | 9 | 22 | 33 |
| Total | 7 | 37 | 42 | 86 |

$X^2 = 13.0$

The Non-Verbal Reasoning Test is designed to measure, through the medium of pictorial problems, a person's capacity to think logically. Such a test would seem to be particularly appropriate for use with these trainees. The relationship between scores on this test and instructors' evaluation scores is shown below.

TABLE LXXV

NON-VERBAL REASONING TEST SCORES AND INSTRUCTORS' EXIT EVALUATIONS

| Non-Verbal Reasoning Test Scores | Instructors' Exit Evaluation of Trainee Performance | | | |
|---|---|---|---|---|
| | Below Average | Average | Above Average | Total |
| Low | 6 | 36 | 44 | 86 |
| Average | 0 | 1 | 2 | 3 |
| High | 0 | 0 | 0 | 0 |
| Total | 6 | 37 | 46 | 89 |

$X^2 = .42$

TABLE LXXVI

VERBAL REASONING TEST SCORES AND INSTRUCTORS' EXIT EVALUATIONS

| Verbal Reasoning Test Scores | Instructors' Exit Evaluation of Trainees Performance | | | |
|---|---|---|---|---|
| | Below Average | Average | Above Average | Total |
| Low | 3 | 10 | 10 | 23 |
| Average | 3 | 24 | 33 | 60 |
| High | 0 | 3 | 3 | 6 |
| Total | 6 | 37 | 46 | 89 |

$X^2 = 1.37$

The relationship between the instructors' evaluation of trainee performance and scores on the Revised Beta Examination are considered significant. The relationships between performance scores and both the Verbal and Non-Verbal Reasoning Tests were not significant. Scores on the perceptual abilities tests were so concentrated in the low range of scores as to suggest that effort to discover the relationship between them and instructors' performance scores would be a futile exercise.

The fourth antecedent variable to be considered is emotional adjustment. Our second operational hypothesis is:

2. There is no significant difference in terms of emotional adjustment and performance in training.

The indicators of emotional adjustment used were:

The Rotter Incomplete Sentences Blank

The Emo Questionnaire

The latter provided scores on internal adjustment, environmental adjustment, and overall adjustment. An attempt is made to describe whatever relationship there may be between instructors' evaluation scores and scores made on tests used as indicators of emotional adjustment. The Rotter Incomplete Sentences Blank is designed to describe maladjustment and direction of maladjustment.

### TABLE LXXVII

### ROTTER INCOMPLETE SENTENCE BLANK SCORES AND INSTRUCTORS' EXIT EVALUATIONS

| Rotter Incomplete Sentences Blank Scores | Instructors' Exit Evaluation of Trainee Performance | | | |
|---|---|---|---|---|
| | Below Average | Average | Above Average | Total |
| Low | 2 | 11 | 8 | 21 |
| Average | 3 | 17 | 25 | 45 |
| High | 1 | 3 | 7 | 11 |
| Total | 6 | 31 | 40 | 77 |

$X^2 = 2.62$

The chi square obtained indicates there is no significant relationship between scores on the Rotter Test and scores on the instructors' evaluation.

## TABLE LXXVIII

## EMO QUESTIONNAIRE OVERALL ADJUSTMENT SCORES AND INSTRUCTORS' EXIT EVALUATIONS

| Emo Questionnaire Overall Adjustment Scores | Instructors' Exit Evaluation of Trainee Performance | | | |
|---|---|---|---|---|
| | Below Average | Average | Above Average | Total |
| Below Average | 4 | 8 | 5 | 17 |
| Average | 0 | 17 | 19 | 36 |
| Above Average | 3 | 9 | 21 | 33 |
| Total | 7 | 34 | 45 | 86 |

$X^2 = 12.34$

## TABLE LXXIX

## EMO QUESTIONNAIRE ENVIRONMENTAL ADJUSTMENT SCORES AND INSTRUCTORS' EXIT EVALUATION

| Emo Questionnaire Environmental Adjustment Score | Instructors' Exit Evaluation of Trainee Performance | | | |
|---|---|---|---|---|
| | Below Average | Average | Above Average | Total |
| Below Average | 4 | 2 | 10 | 16 |
| Average | 2 | 15 | 24 | 41 |
| Above Average | 1 | 17 | 11 | 29 |
| Total | 7 | 34 | 45 | 86 |

$X^2 = 15.62$

## TABLE LXXX

## EMO QUESTIONNAIRE INTERNAL ADJUSTMENT SCORES AND INSTRUCTORS' EXIT EVALUATION

| Emo Questionnaire Internal Adjustment Scores | Instructors' Exit Evaluation of Trainee Performance | | | |
|---|---|---|---|---|
| | Below Average | Average | Above Average | Total |
| Below Average | 1 | 7 | 4 | 12 |
| Average | 3 | 10 | 18 | 31 |
| Above Average | 3 | 17 | 23 | 43 |
| Total | 7 | 34 | 45 | 86 |

$X^2 = 2.74$

The chi squares obtained indicate there is a significant relationship between instructors' evaluation and the Emo Overall Adjustment Scale and Environmental Adjustment Scale but not a significant relationship between instructors' evaluation and the Emo Internal Adjustment scores and the Rotter Incomplete Sentences Blank scores.

To test the creative ability of the trainees, the Cree Questionnaire and the AC Test of Creative Ability were administered. Chi square distributions showed a significant relationship between the instructors' evaluations and the Cree Questionnaire ($X^2 = 18.31$), but not between the instructors' evaluations of performance and the AC Test of Creative Ability ($X^2 = 8.82$). No measures of creativity on the part of trainees in the course of training were used. Creative potential and creative performance may not be related.

Other tests whose results showed no significant relationship to the trainees' performance as reported in the instructors' evaluations were:

1. Space Thinking
2. Word Fluency
3. Understanding Communication

The following tests appeared useful as indicators of the performance potential of the population in this MDT training project:

1. The Revised Beta as a measure of mental ability.
2. The Work Interest Index and the Minnesota Vocational Interest Inventory proved useful as measures of interest.
3. The Gray Oral Reading Test as a measure of the reading levels.
4. The Iowa Tests of Basic Skills proved useful as measures of skill levels.
5. The Rotter Incomplete Sentence Blank, Cassel Group Level of Aspiration and the Emo Questionnaire proved useful in measuring aspects of personality and adjustment, but they should be used in connection with other measures of personality and adjustment rather than the single use of either.

### B. SUCCESSFUL OCCUPATIONAL TRAINING DEPENDS UPON THE LEVEL OF BASIC EDUCATION OF THE TRAINEES.

The trainees were divided into two groups at entry into training. One group (Group "A") had a mean reading grade level of 9.6 and the other (Group "AA") a mean reading grade level of 4.9.

3. There is no significant difference in terms of performance in Technical training between trainees with some elementary education and those with some high school education.

When Groups "A" and "AA" are compared in terms of the technical skills, instructors' exit evaluations, no significant relationship is observed between literacy level and performance in technical skills classes.

TABLE LXXXI

TECHNICAL SKILLS INSTRUCTORS' EXIT EVALUATIONS OF TRAINEES IN GROUPS "A" AND "AA"

| Technical Skills Instructors' Evaluations | Group "A" | Group "AA" |
|---|---|---|
| High | 26 | 21 |
| Low | 15 | 22 |

$X^2 = 1.74$

## Instructors' Evaluations

The foregoing discussion of the relationship of scores on tests and instructors' evaluations of performance in training carries the implicit assumption that an evaluation by an instructor is a valid measure of performance. Validity of this assumption may be questioned, and instructors' evaluations were examined.

There were three technical instructors, two communications instructors and two computation instructors, each of whom made three evaluations of the performance of each trainee he or she taught at three-month, six-month, and twelve-month intervals. The numerical scores were grouped into three general levels of reported performance - low, average, high.

A first consideration is what kind of scorer the instructor was. The following table shows scoring of the trainees by technical skills instructors:

## TABLE LXXXII

## COMPARISON OF EVALUATION PATTERNS OF TECHNICAL SKILLS INSTRUCTORS

| Scoring Category at Each Evaluation | Brickmasonry | Carpentry PERCENT | Meat Processing |
|---|---|---|---|
| High | | | |
| First | 50 | 54 | 69 |
| Second | 45 | 52 | 59 |
| Third | 52 | 62 | 53 |
| Average | | | |
| First | 30 | 33 | 28 |
| Second | 34 | 28 | 37 |
| Third | 27 | 17 | 35 |
| Low | | | |
| First | 20 | 13 | 3 |
| Second | 21 | 20 | 4 |
| Third | 21 | 21 | 12 |

## TABLE LXXXIII

## COMPARISON OF EVALUATION PATTERNS OF COMMUNICATION SKILLS AND COMPUTATION SKILLS INSTRUCTORS

| Scoring Category at Each Evaluation | Communication Instructor #1 | | Communication Instructor #2 | |
|---|---|---|---|---|
| | Section 1 | Section 2 | Section 1 | Section 2 |
| High | | | | |
| First | 70 | 79 | 40 | 37 |
| Second | 55 | 54 | 59 | 50 |
| Third | 62 | 62 | 72 | 25 |
| Average | | | | |
| First | 28 | 21 | 51 | 50 |
| Second | 28 | 46 | 30 | 37 |
| Third | 31 | 31 | 20 | 56 |
| Low | | | | |
| First | 2 | 0 | 9 | 13 |
| Second | 17 | 0 | 11 | 13 |
| Third | 7 | 7 | 8 | 19 |

| Scoring Category at Each Evaluation | Computation Instructor #1 | | Computation Instructor #2 | |
|---|---|---|---|---|
| | Section 1 | Section 2 | Section 1 | Section 2 |
| High | | | | |
| First | 43 | 19 | 55 | 43 |
| Second | 66 | 38 | 59 | 77 |
| Third | 48 | 25 | 61 | 46 |
| Average | | | | |
| First | 40 | 31 | 28 | 50 |
| Second | 24 | 38 | 26 | 15 |
| Third | 38 | 31 | 31 | 46 |
| Low | | | | |
| First | 17 | 50 | 17 | 7 |
| Second | 10 | 25 | 15 | 8 |
| Third | 14 | 44 | 8 | 8 |

4. There is no significant difference in terms of performance level of trainees in technical skills instruction and in basic education classes.

A second consideration of the instructors' evaluations was what relationship may be observed between the vocational skills instructors' scores and the communication and computation instructors' scores. On the third or exit evaluation, the scores showed the following relationships which were significant as measured by chi square:

EXIT EVALUATION

| Vocational Skills | Communication Skills High | Communication Skills Low | Computation Skills High | Computation Skills Low |
|---|---|---|---|---|
| High | 38 | 8 | 33 | 13 |
| Low | 12 | 26 | 6 | 32 |
| | $X^2 = 24.18$ | | $X^2 = 27.82$ | |

Another check on the communication and computation skills instructors' evaluation was made by re-administering the Iowa Tests of Basic Skills at the end of training and comparing the results which indicated a significant relationship which follows:

| Iowa Tests of Skills | Instructors' Exit Evaluation High | Instructors' Exit Evaluation Low |
|---|---|---|
| 7.5 and above | 19 | 5 |
| 4.5 - 7.4 | 25 | 28 |
| | $X^2 = 9.90$ | |

C. ADULTS WHO LACK MARKETABLE SKILLS CAN BE GIVEN SUFFICIENT TECHNICAL INFORMATION ABOUT A SKILL AND DEVELOP ADEQUATE USE OF FUNDAMENTAL TECHNIQUES IN USE OF THE SKILL IN A 12-MONTH PERIOD OF TRAINING TO EQUIP THEM WITH ESSENTIAL OCCUPATIONAL KNOW-HOW FOR ENTRY EMPLOYMENT AT THE SKILL.

5. Instructors' evaluations are a good indicator of potential satisfaction in job performance.

Of the 11 unemployed former trainees, one was given an exit evaluation of above average by technical skills instructors, four were given exit evaluations of average, and six were given exit evaluations of below average.

Of the 56 employed former trainees, 46 were reported as doing satisfactory work and 11 as doing unsatisfactory work by their employers. When satisfaction on the first job held is related to literacy groups "A" and "AA", the following is the result:

| Employers Estimate of Job Performance | Literacy Group "A" | "AA" |
|---|---|---|
| Satisfactory | 25 | 21 |
| Unsatisfactory | 3 | 7 |

There appears some difference according to literacy group, but not enough to calculate satistically.

A test of employers verbal appraisal of employee satisfaction may be wages paid. We examine the wages of all trainee-employees on the first job they held and get the following results:

| Hourly Wages | Literacy Group "A" | Literacy Group "AA" |
|---|---|---|
| $1.00 - $1.99 | 1 | 0 |
| $2.00 - $2.99 | 12 | 17 |
| $3.00 and Over | 22 | 14 |
| Not Given | 0 | 1 |

$X^2 = 2.24$ not significant

Seventeen trainee-employees in Group "A" and 20 trainee-employees in Group "AA" reported having worked on a second job between completion of training and the follow-up survey. The comparative wages were:

| Hourly Wages | Literacy Group "A" | Literacy Group "AA" |
|---|---|---|
| $1.00 - $1.99 | 6 | 14 |
| $2.00 - $2.99 | 8 | 6 |
| $3.00 and Over | 2 | 0 |
| Not Given | 1 | |

$X^2 = 2.57$ not significant

6. Peer evaluations are not useful indicators of satisfactory job performance.

A sociometric exercise was utilized in order to secure the trainees' evaluation of their peers. The question used to get an estimate of potential job performance was:

> If you are offered employment when you complete your training here where you would work with a partner and success on the job depended on how good a job your partner would do, who in this group would you choose to be your partner?

Eight of the 11 unemployed trainee-employees were not selected by any of their peers and were classified as "Isolates".

When peer evaluation and satisfactory and unsatisfactory employer estimates of job performance were related, a significant $X^2$ of 4.45 was obtained.

The program of instruction and the program of counseling as intervening variables were an initial concern of this experiment but no means were found to measure their influence on in-put characteristics that would influence success in training or satisfaction in job performance. We assume that the lack of differentials between Group "A" and "AA" in job performance may be attributed to the influence of the training program and the counseling program.

## Summary

The objective of this analysis was to determine the relationships between the dependent variables--Performance in Training and Performance on the Job, and assorted independent variables assumed to be related to success, or lack of success, in training and on the job.

. We have a small number of cases -- a possible total of 84 trainees who completed training, and 67 who were included in the follow-up survey. To determine the relationship between our qualitative variables, the idea of correlation applied to non-quantitative data, called contingency, is used. The $X^2$ (chi square) measure may be used to express significance of relationships since our number of cases is both small and constant. The fact that a large N (number of cases) is likely to produce a large $X^2$ is of no importance in our circumstance where the N remains constant. The significance is determined at .05 level. The larger the chi square, the stronger the relationship between the variables, is clearly evident in this analysis.

A summation of our findings presenting the qualitative variable considered the indicators used and the significance of relationship between the variable and performance in training and performance on the job is given below.

| Qualitative Variable | Indicator (Tests Used) | $X^2$ | Relationship to Performance in Training |
|---|---|---|---|
| INTEREST | Work Interest Flexibility | 6.55 | Significant |
| | Work Interest Aspiration | 2.88 | Not Significant |
| APTITUDES | Mechanical Movement | 3.16 | Not Significant |
| | Intuitive Movement | 36.01 | Significant |
| INTELLECTUAL DEVELOPMENT | Revised Beta Examination | 13.0 | Significant |
| | Non-Verbal Reasoning | .42 | Not Significant |
| | Verbal Reasoning | 1.37 | Not Significant |
| ADJUSTMENT | Rotter Incomplete Sentence Blank | 2.62 | Not Significant |
| | Emo Questionnaire | | |
| | Internal Adjustment | 2.74 | Not Significant |
| | Environmental Adjustment | 15.62 | Significant |
| | Overall Adjustment | 12.34 | Significant |
| | | | Relationship to Satisfactory Job Performance |
| TRAINING SUCCESS | Teachers' Evaluation | | |
| | Course Performance | 8.13 | Significant |

| Qualitative Variable | Indicator (Tests Used) | $X^2$ | Relationship to Satisfactory Job Performance |
|---|---|---|---|
| TRAINING SUCCESS | Teachers' Evaluation | | |
| | Personal Characteristics | 5.22 | Significant |
| | Peer Evaluation | 4.45 | Significant |

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# DESCRIPTIVE STATISTICS

## CHARACTERISTICS OF TRAINEES IN LITERACY CATEGORIES

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| TOTAL | 47 | 100 | 45 | 100 |

### Table 1. AGE OF MALE TRAINEES

| Age | | | | |
|---|---|---|---|---|
| 20 - 24 | 10 | 21.3 | 9 | 20.0 |
| 25 - 29 | 7 | 14.9 | 8 | 17.8 |
| 30 - 34 | 8 | 17.0 | 9 | 20.0 |
| 35 - 39 | 10 | 21.3 | 5 | 11.1 |
| 40 - 44 | 9 | 19.1 | 12 | 26.7 |
| 45 - 49 | 3 | 6.4 | 2 | 4.4 |

### Table 2. PROFESSED GRADE COMPLETED FOR MALE TRAINEES

| Grade Completed | | | | |
|---|---|---|---|---|
| Under 4 | 0 | 0 | 1 | 2.2 |
| 4 - 6 | 8 | 17.0 | 10 | 22.2 |
| 7 - 9 | 13 | 27.7 | 20 | 44.4 |
| 10 - 12 | 26 | 55.3 | 13 | 28.9 |
| Not Given | | | 1 | 2.2 |

### Table 3. REVISED BETA I.Q. SCORE

| I.Q. Score | | | | |
|---|---|---|---|---|
| 90 - 109 Average | 24 | 51.1 | 14 | 31.1 |
| 80 - 89 Below Average | 16 | 34.0 | 13 | 28.9 |
| 71 - 79 Inferior | 4 | 8.5 | 12 | 26.7 |
| 70 and Below - Defective | 3 | 6.4 | 6 | 13.3 |

### Table 4. ENTRANCE READING SCORE

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| Score | | | | |
| Below 2.0 | 0 | 0 | 2 | 4.4 |
| 2.0 - 3.9 | 0 | 0 | 7 | 15.6 |
| 4.0 - 5.9 | 2 | 4.3 | 27 | 60.0 |
| 6.0 - 7.9 | 8 | 17.0 | 7 | 15.6 |
| 8.0 - 9.9 | 14 | 29.8 | 2 | 4.4 |
| 10.0 - 11.9 | 6 | 12.8 | 0 | 0 |
| 12.0 and Above | 17 | 36.2 | 0 | 0 |

Mean 9.57; S.D. 2.33

Mean 4.67; S. D. 1.55

### Table 5. SERIOUS PROBLEMS ON MOONEY PROBLEM CHECK LIST

| | | | | |
|---|---|---|---|---|
| Number of Problems | | | | |
| None | 4 | 8.5 | 7 | 15.6 |
| 1 - 5 | 16 | 34.0 | 9 | 20.0 |
| 5 - 10 | 7 | 14.9 | 13 | 28.9 |
| Over 10 | 20 | 42.6 | 16 | 35.6 |

### Table 6. INTERNAL ADJUSTMENT ON LEVEL OF EMOTIONAL HEALTH

| | | | | |
|---|---|---|---|---|
| Internal Adjustment Score | | | | |
| Not Given | 2 | 4.3 | 2 | 4.4 |
| Above Average | 22 | 46.8 | 22 | 48.9 |
| Average | 13 | 27.7 | 19 | 42.2 |
| Below Average | 10 | 21.3 | 2 | 4.4 |

Table 7. ENVIRONMENTAL ADJUSTMENT ON LEVEL OF EMOTIONAL HEALTH

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| Environmental Adjustment Score | | | | |
| Not Given | 2 | 4.3 | 2 | 4.4 |
| Above Average | 9 | 19.1 | 4 | 8.9 |
| Average | 20 | 42.6 | 22 | 48.9 |
| Below Average | 16 | 34.0 | 17 | 37.8 |

Table 8. OVERALL ADJUSTMENT

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| Overall Adjustment Score | | | | |
| Not Given | 2 | 4.3 | 2 | 4.4 |
| Above Average | 17 | 36.2 | 17 | 37.8 |
| Average | 17 | 36.2 | 20 | 44.4 |
| Below Average | 11 | 23.4 | 6 | 13.3 |

Table 9. ROTTER INCOMPLETE SENTENCE BLANK

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| Score | | | | |
| Not Given | 10 | 21.3 | 3 | 6.7 |
| 130 - 139 | 2 | 4.3 | 0 | 0 |
| 120 - 129 | 7 | 14.9 | 3 | 6.7 |
| 110 - 119 | 7 | 14.9 | 5 | 11.1 |
| 100 - 109 | 6 | 12.8 | 8 | 17.8 |
| 90 - 98 | 6 | 12.8 | 13 | 28.9 |
| 80 - 89 | 6 | 12.8 | 10 | 22.2 |
| 70 - 79 | 3 | 6.4 | 2 | 4.4 |
| 60 - 69 | 0 | 0 | 1 | 2.2 |

## Table 10. CASSEL GROUP LEVEL OF ASPIRATION FIRST GOAL SCORE

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| Score | Number | Percent | Number | Percent |
| Not Given | 3 | 6.4 | 1 | 2.2 |
| 3 - 8 | 0 | 0 | 2 | 4.4 |
| 9 - 14 | 4 | 8.5 | 3 | 6.7 |
| 15 - 20 | 19 | 40.4 | 22 | 48.9 |
| 21 - 26 | 8 | 17.0 | 6 | 13.3 |
| 27 - 32 | 5 | 10.6 | 7 | 15.6 |
| 33 - 38 | 5 | 10.6 | 0 | 0 |
| 39 - 44 | 3 | 6.4 | 4 | 8.9 |

## Table 11. CASSEL ASPIRATION D SCORE

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| Score | Number | Percent | Number | Percent |
| Not Given | 3 | 6.4 | 1 | 2.2 |
| 0 - 9 | 11 | 23.4 | 8 | 17.8 |
| 1.0 - 1.9 | 14 | 29.8 | 18 | 40.0 |
| 2.0 - 2.9 | 8 | 17.0 | 12 | 26.7 |
| 3.0 - 3.9 | 6 | 12.8 | 2 | 4.4 |
| 4.0 - 4.9 | 1 | 2.1 | 0 | 0 |
| 5.0 - 5.9 | 1 | 2.1 | 3 | 6.7 |
| 6.0 - 6.9 | 3 | 6.4 | 1 | 2.2 |

## Table 12. CASSEL LEVEL OF ASPIRATION SCORE

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| Score | Number | Percent | Number | Percent |
| Not Given | 3 | 6.4 | 1 | 2.2 |
| 0 - 19 | 2 | 4.3 | 2 | 4.4 |
| 20 - 39 | 1 | 2.1 | 1 | 2.2 |
| 40 - 59 | 1 | 2.1 | 9 | 20.0 |
| 60 - 79 | 15 | 31.9 | 14 | 31.1 |
| 80 - 99 | 15 | 31.9 | 9 | 20.0 |
| 100 - 119 | 7 | 14.9 | 4 | 8.9 |
| 120 - 139 | 2 | 4.3 | 3 | 6.7 |
| 140 and Above | 1 | 2.1 | 2 | 4.4 |
| | Mean 83.1; S.D. 27.0 | | Mean 77.2; S.D. 31.4 | |

Table 13. EXIT READING SCORE

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| Score | Number | Percent | Number | Percent |
| Not Given | 6 | 12.8 | 3 | 6.7 |
| Below 2.0 | 0 | 0 | 2 | 4.4 |
| 2.0 - 3.9 | 0 | 0 | 8 | 17.8 |
| 4.0 - 5.9 | 4 | 8.5 | 12 | 26.7 |
| 6.0 - 7.9 | 9 | 19.1 | 10 | 22.2 |
| 8.0 - 9.9 | 10 | 21.3 | 6 | 13.3 |
| 10.0 - 11.9 | 6 | 12.8 | 2 | 4.4 |
| 12.0 and Above | 12 | 25.5 | 2 | 4.4 |

Table 14. VERBAL REASONING TEST SCORE

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| Score | Number | Percent | Number | Percent |
| Not Given | 2 | 4.3 | 1 | 2.2 |
| 25 - 31 | 2 | 4.3 | 3 | 6.7 |
| 32 - 38 | 4 | 8.5 | 15 | 33.3 |
| 39 - 45 | 17 | 36.2 | 14 | 31.1 |
| 46 - 52 | 13 | 27.7 | 9 | 20.0 |
| 53 - 59 | 4 | 8.5 | 3 | 6.7 |
| 60 - 66 | 5 | 10.6 | 0 | 0 |
| | Mean 46.36; S.D. 8.61 | | Mean 41.05; S.D. 6.58 | |

Table 15. NON-VERBAL REASONING TEST SCORE

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| Score | Number | Percent | Number | Percent |
| Not Given | 1 | 2.1 | 1 | 2.2 |
| 20 and Below | 1 | 2.1 | 7 | 15.6 |
| 21 - 27 | 11 | 23.4 | 13 | 28.9 |
| 28 - 34 | 16 | 34.0 | 15 | 33.3 |
| 35 - 41 | 16 | 34.0 | 8 | 17.8 |
| 42 - 48 | 2 | 4.3 | 0 | 0 |
| 49 - 55 | 0 | 0 | 1 | 2.2 |

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |

## Table 16. WORD FLUENCY TEST SCORE

| Score | | | | |
|---|---|---|---|---|
| Not Given | | | | |
| Below 20 | 5 | 10.6 | 6 | 13.3 |
| 20 - 27 | 7 | 14.9 | 21 | 46.7 |
| 28 - 35 | 12 | 25.5 | 11 | 24.4 |
| 36 - 43 | 15 | 31.9 | 7 | 15.6 |
| 44 - 51 | 6 | 12.8 | 0 | 0 |
| 52 - 59 | 2 | 4.3 | 0 | 0 |

## Table 17. UNDERSTANDING COMMUNICATIONS TEST SCORE

| Score | | | | |
|---|---|---|---|---|
| Not Given | 0 | 0 | 1 | 2.2 |
| 24 - 29 | 8 | 17.0 | 26 | 57.8 |
| 30 - 35 | 18 | 38.3 | 14 | 31.1 |
| 36 - 41 | 12 | 25.5 | 2 | 4.4 |
| 42 - 47 | 7 | 14.9 | 2 | 4.4 |
| 48 - 53 | 1 | 2.1 | 0 | 0 |
| 54 - 59 | 1 | 2.1 | 0 | 0 |

## Table 18. VOCABULARY ON BASIC SKILLS DEVELOPMENT

| Amount of Gain | | | | |
|---|---|---|---|---|
| Not Given | 4 | 8.5 | 9 | 20.0 |
| Loss | 13 | 27.7 | 13 | 28.9 |
| No Loss or Gain | 3 | 6.4 | 1 | 2.2 |
| Gain Less than 0.5 | 8 | 17.0 | 7 | 15.6 |
| Gain 0.5 - 0.9 | 11 | 23.4 | 7 | 15.6 |
| Gain 1.0 - 1.9 | 6 | 12.8 | 6 | 13.3 |
| Gain 2.0 - 2.9 | 1 | 2.1 | 2 | 4.4 |
| Gain 3.0 and Above | 1 | 2.1 | 0 | 0 |

### Table 19. READING ON IOWA TESTS OF BASIC SKILLS

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| Amount of Gain | Number | Percent | Number | Percent |
| Not Given | 3 | 6.4 | 9 | 20.0 |
| Loss | 12 | 25.5 | 11 | 24.4 |
| No Loss or Gain | 2 | 4.3 | 1 | 2.2 |
| Gain Less than 0.5 | 17 | 36.2 | 8 | 17.8 |
| Gain 0.5 - 0.9 | 9 | 19.1 | 4 | 8.9 |
| Gain 1.0 - 1.9 | 4 | 8.5 | 11 | 24.4 |
| Gain 2.0 - 2.9 | 0 | 0 | 1 | 2.2 |
| Gain 3.0 and Above | 0 | 0 | 0 | 0 |

### Table 20. LANGUAGE ON IOWA TESTS OF BASIC SKILLS

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| Amount of Gain | Number | Percent | Number | Percent |
| Not Given | 6 | 12.8 | 10 | 22.2 |
| Loss | 11 | 23.4 | 12 | 26.7 |
| No Loss or Gain | 0 | 0 | 3 | 6.7 |
| Gain Less than 0.5 | 6 | 12.8 | 12 | 26.7 |
| Gain 0.5 - 0.9 | 9 | 19.1 | 6 | 13.3 |
| Gain 1.0 - 1.9 | 14 | 29.8 | 2 | 4.4 |
| Gain 2.0 - 2.9 | 1 | 2.1 | 0 | 0 |
| Gain 3.0 and Above | 0 | 0 | 0 | 0 |

### Table 21. ARITHMETIC ON IOWA TESTS OF BASIC SKILLS

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| Amount of Gain | Number | Percent | Number | Percent |
| Not Given | 5 | 10.6 | 14 | 31.1 |
| Loss | 7 | 14.9 | 12 | 26.7 |
| No Loss or Gain | 0 | 0 | 0 | 0 |
| Gain Less than 0.5 | 4 | 8.5 | 3 | 6.7 |
| Gain 0.5 - 0.9 | 10 | 21.3 | 8 | 17.8 |
| Gain 1.0 - 1.9 | 16 | 34.0 | 7 | 15.6 |
| Gain 2.0 - 2.9 | 2 | 4.3 | 1 | 2.2 |
| Gain 3.0 and Above | 3 | 6.4 | 0 | 0 |

### Table 22. GRADE LEVEL COMPOSITE

| Amount of Gain | GROUP A Number | GROUP A Percent | GROUP AA Number | GROUP AA Percent |
|---|---|---|---|---|
| Not Given | 7 | 14.9 | 5 | 11.1 |
| Loss | 8 | 17.0 | 6 | 13.3 |
| No Loss or Gain | 1 | 2.1 | 1 | 2.2 |
| Gain Less than 0.5 | 5 | 10.6 | 6 | 13.3 |
| Gain 0.5 - 0.9 | 8 | 17.0 | 7 | 15.6 |
| Gain 1.0 - 1.9 | 14 | 29.8 | 16 | 35.6 |
| Gain 2.0 - 2.9 | 3 | 6.4 | 3 | 6.7 |
| Gain 3.0 and Above | 1 | 2.1 | 1 | 2.2 |

### Table 23. READING ON IOWA TESTS OF BASIC SKILLS

| Amount of Gain | GROUP A Number | GROUP A Percent | GROUP AA Number | GROUP AA Percent |
|---|---|---|---|---|
| Not Given | 7 | 14.9 | 7 | 15.6 |
| Loss | 8 | 17.0 | 4 | 8.9 |
| No Loss or Gain | 2 | 4.3 | 0 | 0 |
| Gain Less than 0.5 | 4 | 8.5 | 5 | 11.1 |
| Gain 0.5 - 0.9 | 12 | 25.5 | 13 | 28.9 |
| Gain 1.0 - 1.9 | 10 | 21.3 | 9 | 20.0 |
| Gain 2.0 - 2.9 | 3 | 6.4 | 6 | 13.3 |
| Gain 3.0 and Above | 1 | 2.1 | 1 | 2.2 |

### Table 24. LANGUAGE ON IOWA TESTS OF BASIC SKILLS

| Amount of Gain | GROUP A Number | GROUP A Percent | GROUP AA Number | GROUP AA Percent |
|---|---|---|---|---|
| Not Given | 7 | 14.9 | 5 | 11.1 |
| Loss | 5 | 10.6 | 0 | 0 |
| No Loss or Gain | 1 | 2.1 | 0 | 0 |
| Gain Less than 0.5 | 6 | 12.8 | 5 | 11.1 |
| Gain 0.5 - 0.9 | 12 | 25.5 | 14 | 31.1 |
| Gain 1.0 - 1.9 | 12 | 25.5 | 19 | 42.2 |
| Gain 2.0 - 2.9 | 3 | 6.4 | 2 | 4.4 |
| Gain 3.0 and Above | 1 | 2.1 | 0 | 0 |

Table 25. ARITHMETIC ON IOWA TESTS OF BASIC SKILLS

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| Amount of Gain | | | | |
| Not Given | 8 | 17.0 | 5 | 11.1 |
| Loss | 3 | 6.4 | 1 | 2.2 |
| No Loss or Gain | 0 | 0 | 0 | 0 |
| Gain Less than 0.5 | 4 | 8.5 | 6 | 13.3 |
| Gain 0.5 - 0.9 | 8 | 17.0 | 9 | 20.0 |
| Gain 1.0 - 1.9 | 10 | 21.3 | 20 | 44.4 |
| Gain 2.0 - 2.9 | 6 | 12.8 | 3 | 6.7 |
| Gain 3.0 and Above | 8 | 17.0 | 1 | 2.2 |

Table 26. NICHOLS PROFICIENCY TEST SCORE (FIRST TEST)

| Score | | | | |
|---|---|---|---|---|
| Not Reported | 3 | 6.4 | 5 | 11.1 |
| Under 50 Unsatisfactory | 31 | 66.0 | 33 | 73.3 |
| 50 - 54 Below Average | 5 | 10.6 | 3 | 6.7 |
| 55 - 59 Average | 5 | 10.6 | 3 | 6.7 |
| 60 - 64 Above Average | 3 | 6.4 | 1 | 2.2 |
| 65 and Over Superior | 0 | 0 | 0 | 0 |

Mean 50.0; S.D. 4.69 Mean 48.5; S.D. 3.57

Table 27. NICHOLS PROFICIENCY TEST SCORE (SECOND TEST)

| Score | | | | |
|---|---|---|---|---|
| Not Reported | 6 | 12.8 | 3 | 6.7 |
| Under 50 Unsatisfactory | 3 | 6.4 | 12 | 26.7 |
| 50 - 54 Below Average | 5 | 10.6 | 12 | 26.7 |
| 55 - 59 Average | 13 | 27.7 | 12 | 26.7 |
| 60 - 64 Above Average | 18 | 38.3 | 5 | 11.1 |
| 65 and Over Superior | 2 | 4.3 | 1 | 2.2 |

Mean 58.34; S.D. 2.87 Mean 53.6; S.D. 2.74

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |

### Table 28. MINNESOTA VOCATIONAL INTEREST INVENTORY

| Highest Interest | | | | |
|---|---|---|---|---|
| Not Given | 1 | 2.1 | 0 | 0 |
| Mechanical | 0 | 0 | 0 | 0 |
| Health Service | 2 | 4.3 | 1 | 2.2 |
| Office Work | 6 | 12.8 | 12 | 26.7 |
| Electronics | 2 | 4.3 | 2 | 4.4 |
| Food Service | 2 | 4.3 | 5 | 11.1 |
| Carpentry | 2 | 4.3 | 1 | 2.2 |
| Sales Office | 5 | 10.6 | 0 | 0 |
| Clean Hands | 25 | 53.2 | 24 | 53.3 |
| Outdoors | 2 | 4.3 | 0 | 0 |

### Table 29. MINNESOTA VOCATIONAL INTEREST INVENTORY

| Lowest Interest | | | | |
|---|---|---|---|---|
| Not Given | 5 | 10.6 | 1 | 2.2 |
| Mechanical | 12 | 25.5 | 19 | 42.2 |
| Health Service | 2 | 4.3 | 1 | 2.2 |
| Office Work | 2 | 4.3 | 2 | 4.4 |
| Electronics | 6 | 12.8 | 4 | 8.9 |
| Food Service | 1 | 2.1 | 0 | 0 |
| Carpentry | 6 | 12.8 | 7 | 15.6 |
| Sales Office | 1 | 2.1 | 1 | 2.2 |
| Clean Hands | 0 | 0 | 1 | 2.2 |
| Outdoors | 12 | 25.5 | 9 | 20.0 |

### Table 30. WORK INTEREST INDEX SCORE - FLEXIBILITY SCORE

| Score | | | | |
|---|---|---|---|---|
| Not Given | 4 | 8.5 | 4 | 8.9 |
| 20 - 29 Very Low | 0 | 0 | 0 | 0 |
| 30 - 39 Low | 0 | 0 | 0 | 0 |
| 40 - 60 Average | 29 | 61.7 | 24 | 53.3 |
| 61 - 70 High | 13 | 27.7 | 13 | 28.9 |
| 71 - 80 Very High | 1 | 2.1 | 4 | 8.9 |

Table 31. WORK INTEREST ASPIRATION LEVEL SCORE

| | GROUP A | | GROUP AA | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| Score | | | | |
| 20 - 29 Very Low | 4 | 8.5 | 4 | 8.9 |
| 30 - 39 Low | 0 | 0 | 0 | 0 |
| 40 - 60 Average | 6 | 12.8 | 2 | 4.4 |
| 61 - 70 High | 37 | 78.7 | 38 | 84.4 |
| 71 - 80 Very High | 0 | 0 | 1 | 2.2 |

## CHARACTERISTICS OF TRAINEES IN EACH VOCATIONAL AREA

| | Carpentry | | Brickmasonry | | Meat Processing | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| TOTAL | 31 | 100 | 31 | 100 | 30 | 100 |

### Table 1. AGE

| Age | Carpentry Number | Carpentry Percent | Brickmasonry Number | Brickmasonry Percent | Meat Processing Number | Meat Processing Percent |
|---|---|---|---|---|---|---|
| 20 - 24 years | 3 | 9.7 | 9 | 29.0 | 7 | 23.3 |
| 25 - 29 years | 4 | 12.9 | 3 | 9.7 | 8 | 26.7 |
| 30 - 34 years | 7 | 22.6 | 8 | 25.8 | 4 | 13.3 |
| 35 - 39 years | 4 | 12.9 | 5 | 16.1 | 4 | 13.3 |
| 40 - 44 years | 11 | 35.5 | 5 | 16.1 | 5 | 16.7 |
| 45 - 49 years | 2 | 6.5 | 1 | 3.2 | 2 | 6.7 |

### Table 2. REVISED BETA I.Q. SCORE

| I.Q. | Carpentry Number | Carpentry Percent | Brickmasonry Number | Brickmasonry Percent | Meat Processing Number | Meat Processing Percent |
|---|---|---|---|---|---|---|
| 90 - 109 Average | 13 | 41.9 | 11 | 35.5 | 13 | 43.3 |
| 80 - 89 Below Average | 9 | 29.0 | 9 | 29.0 | 13 | 43.3 |
| 71 - 79 Inferior | 5 | 16.1 | 8 | 25.8 | 2 | 6.7 |
| 70 and Below - Defective | 4 | 12.9 | 3 | 9.7 | 2 | 6.7 |

### Table 3. ENTRANCE READING LEVEL

| Reading Score | Carpentry Number | Carpentry Percent | Brickmasonry Number | Brickmasonry Percent | Meat Processing Number | Meat Processing Percent |
|---|---|---|---|---|---|---|
| Below 2.0 | 1 | 3.2 | 1 | 3.2 | 0 | 0 |
| 2.0 - 3.9 | 3 | 9.7 | 4 | 12.9 | 0 | 0 |
| 4.0 - 5.9 | 9 | 29.0 | 12 | 41.9 | 8 | 26.7 |
| 6.0 - 7.9 | 9 | 29.0 | 3 | 9.7 | 3 | 10.0 |
| 8.0 - 9.9 | 5 | 16.1 | 2 | 6.5 | 8 | 26.7 |
| 10.0 - 11.9 | 1 | 3.2 | 1 | 3.2 | 4 | 13.3 |
| 12.0 and Above | 3 | 9.7 | 7 | 22.6 | 7 | 23.3 |

## COURSE PERFORMANCE (FIRST RATING)

### Table 4. PARTICIPATION (Response to Assignment)

| Rating | Carpentry | | Brickmasonry | | Meat Processing | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 1 | 3.2 | 0 | 0 | 1 | 3.3 |
| Unsatisfactory | 0 | 0 | 0 | 0 | 0 | 0 |
| Below Average | 2 | 6.5 | 1 | 3.2 | 0 | 0 |
| Average | 8 | 25.8 | 7 | 22.6 | 0 | 0 |
| Above Average | 14 | 45.2 | 17 | 54.8 | 18 | 60.0 |
| Superior | 6 | 19.4 | 6 | 19.4 | 11 | 36.7 |

### Table 5. PERFORMANCE AND QUALITY OF WORK

| Rating | Carpentry | | Brickmasonry | | Meat Processing | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 1 | 3.2 | 1 | 3.2 | 1 | 3.3 |
| Unsatisfactory | 0 | 0 | 0 | 0 | 0 | 0 |
| Below Average | 4 | 12.9 | 4 | 12.9 | 3 | 10.0 |
| Average | 13 | 41.9 | 14 | 45.2 | 13 | 43.3 |
| Above Average | 11 | 35.5 | 10 | 32.3 | 8 | 26.7 |
| Superior | 2 | 6.5 | 2 | 6.5 | 5 | 16.7 |

### Table 6. INDUSTRY

| Rating | Carpentry | | Brickmasonry | | Meat Processing | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 1 | 3.2 | 0 | 0 | 1 | 3.3 |
| Unsatisfactory | 0 | 0 | 0 | 0 | 0 | 0 |
| Below Average | 3 | 9.7 | 2 | 6.5 | 2 | 6.7 |
| Average | 10 | 32.3 | 12 | 38.7 | 9 | 30.0 |
| Above Average | 17 | 54.8 | 16 | 51.6 | 14 | 46.7 |
| Superior | 0 | 0 | 1 | 3.2 | 4 | 13.3 |

|  | Carpentry |  | Brickmasonry |  | Meat Processing |  |
|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent |
| **Table 7. INITIATIVE** |  |  |  |  |  |  |
| Rating |  |  |  |  |  |  |
| Not Given | 1 | 3.2 | 0 | 0 | 1 | 3.3 |
| Unsatisfactory | 1 | 3.2 | 0 | 0 | 1 | 3.3 |
| Below Average | 4 | 12.9 | 4 | 12.9 | 7 | 23.3 |
| Average | 13 | 41.9 | 17 | 54.8 | 14 | 46.7 |
| Above Average | 12 | 38.7 | 9 | 29.0 | 7 | 23.3 |
| Superior | 0 | 0 | 1 | 3.2 | 0 | 0 |
| **Table 8. RESPONSIBILITY** |  |  |  |  |  |  |
| Rating |  |  |  |  |  |  |
| Not Given | 1 | 3.2 | 0 | 0 | 1 | 3.3 |
| Unsatisfactory | 0 | 0 | 1 | 3.2 | 0 | 0 |
| Below Average | 5 | 16.1 | 5 | 16.1 | 1 | 3.3 |
| Average | 11 | 35.5 | 12 | 38.7 | 13 | 43.3 |
| Above Average | 13 | 41.9 | 13 | 41.9 | 12 | 40.0 |
| Superior | 1 | 3.2 | 0 | 0 | 3 | 10.0 |
| **Table 9. ENGLISH TEACHERS' TOTAL SCORE** |  |  |  |  |  |  |
| Rating |  |  |  |  |  |  |
| Not Given | 1 | 3.2 | 0 | 0 | 1 | 3.3 |
| Unsatisfactory | 0 | 0 | 1 | 3.2 | 0 | 0 |
| Below Average | 2 | 6.5 | 1 | 3.2 | 2 | 6.7 |
| Average | 11 | 35.5 | 8 | 25.8 | 16 | 53.3 |
| Above Average | 17 | 54.8 | 20 | 61.3 | 10 | 33.3 |
| Superior | 0 | 0 | 2 | 6.5 | 1 | 3.3 |

## Table 10. MATHEMATICS TEACHERS' TOTAL SCORE

| Rating | Carpentry | | Brickmasonry | | Meat Processing | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 1 | 3.2 | 0 | 0 | 1 | 3.3 |
| Unsatisfactory | 2 | 6.5 | 3 | 9.7 | 0 | 0 |
| Below Average | 7 | 22.6 | 2 | 6.5 | 5 | 16.7 |
| Average | 12 | 38.7 | 13 | 41.9 | 8 | 26.7 |
| Above Average | 9 | 29.0 | 12 | 38.7 | 14 | 46.7 |
| Superior | 0 | 0 | 1 | 3.2 | 2 | 6.7 |

## Table 11. TRADE TEACHERS' TOTAL SCORE

| Rating | Carpentry | | Brickmasonry | | Meat Processing | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 1 | 3.2 | 0 | 0 | 1 | 3.3 |
| Unsatisfactory | 1 | 3.2 | 0 | 0 | 0 | 0 |
| Below Average | 3 | 9.7 | 7 | 22.6 | 0 | 0 |
| Average | 10 | 32.3 | 9 | 29.0 | 9 | 30.0 |
| Above Average | 7 | 22.6 | 10 | 32.3 | 10 | 33.3 |
| Superior | 9 | 29.0 | 5 | 16.1 | 10 | 33.3 |

## Table 12. AVERAGE OF TOTAL SCORES ON FIRST RATING

| Rating | Carpentry | | Brickmasonry | | Meat Processing | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 1 | 3.2 | 0 | 0 | 1 | 3.3 |
| Unsatisfactory | 0 | 0 | 0 | 0 | 0 | 0 |
| Below Average | 4 | 12.9 | 3 | 9.7 | 0 | 0 |
| Average | 12 | 38.7 | 14 | 45.2 | 11 | 36.7 |
| Above Average | 13 | 41.9 | 13 | 41.9 | 17 | 53.3 |
| Superior | 1 | 3.2 | 1 | 3.2 | 2 | 6.7 |

## COURSE PERFORMANCE (SECOND RATING)

### Table 13. PARTICIPATION (Response to Assignment)

| Rating | Carpentry |  | Brickmasonry |  | Meat Processing |  |
|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 2 | 6.5 | 2 | 6.5 | 3 | 10.0 |
| Unsatisfactory | 0 | 0 | 0 | 0 | 0 | 0 |
| Below Average | 2 | 6.5 | 2 | 6.5 | 0 | 0 |
| Average | 8 | 25.8 | 6 | 19.4 | 4 | 13.3 |
| Above Average | 15 | 48.4 | 11 | 35.5 | 10 | 33.3 |
| Superior | 4 | 12.9 | 10 | 32.3 | 13 | 43.3 |

### Table 14. PERFORMANCE AND QUALITY OF WORK

| Rating | Carpentry |  | Brickmasonry |  | Meat Processing |  |
|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 2 | 6.5 | 2 | 6.5 | 3 | 10.0 |
| Unsatisfactory | 0 | 0 | 0 | 0 | 0 | 0 |
| Below Average | 3 | 9.7 | 2 | 6.5 | 4 | 13.3 |
| Average | 14 | 45.2 | 16 | 51.6 | 10 | 33.3 |
| Above Average | 10 | 32.3 | 9 | 29.0 | 12 | 40.0 |
| Superior | 2 | 6.5 | 2 | 6.5 | 1 | 3.3 |

### Table 15. INDUSTRY

| Rating | Carpentry |  | Brickmasonry |  | Meat Processing |  |
|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 2 | 6.5 | 1 | 3.2 | 3 | 10.0 |
| Unsatisfactory | 2 | 6.5 | 2 | 6.5 | 3 | 10.0 |
| Below Average | 0 | 0 | 0 | 0 | 0 | 0 |
| Average | 3 | 9.7 | 5 | 16.1 | 3 | 10.0 |
| Above Average | 10 | 32.3 | 10 | 32.3 | 9 | 30.0 |
| Superior | 14 | 45.2 | 13 | 41.9 | 12 | 40.0 |

### Table 16. INITIATIVE

| | Carpentry | | Brickmasonry | | Meat Processing | |
|---|---|---|---|---|---|---|
| Rating | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 2 | 6.5 | 2 | 6.5 | 3 | 10.0 |
| Unsatisfactory | 0 | 0 | 1 | 3.2 | 0 | 0 |
| Below Average | 4 | 12.9 | 4 | 12.9 | 2 | 6.7 |
| Average | 17 | 54.8 | 15 | 48.4 | 11 | 36.7 |
| Above Average | 8 | 25.8 | 9 | 29.0 | 13 | 43.3 |
| Superior | | | | | 1 | 3.3 |

### Table 17. RESPONSIBILITY

| | Carpentry | | Brickmasonry | | Meat Processing | |
|---|---|---|---|---|---|---|
| Rating | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 2 | 6.5 | 2 | 6.5 | 3 | 10.0 |
| Unsatisfactory | 0 | 0 | 1 | 3.2 | 0 | 0 |
| Below Average | 5 | 16.1 | 6 | 19.4 | 0 | 0 |
| Average | 9 | 29.0 | 7 | 22.6 | 10 | 33.3 |
| Above Average | 13 | 41.9 | 15 | 48.4 | 13 | 43.3 |
| Superior | 2 | 6.5 | 0 | 0 | 4 | 13.3 |

### Table 18. ENGLISH TEACHERS' TOTAL SCORE

| | Carpentry | | Brickmasonry | | Meat Processing | |
|---|---|---|---|---|---|---|
| Rating | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 2 | 6.5 | 2 | 6.5 | 3 | 10.0 |
| Unsatisfactory | 3 | 9.7 | 1 | 3.2 | 0 | 0 |
| Below Average | 11 | 35.5 | 4 | 12.9 | 2 | 6.7 |
| Average | 13 | 41.9 | 9 | 29.0 | 9 | 30.0 |
| Above Average | 2 | 6.5 | 15 | 48.4 | 13 | 43.3 |
| Superior | 0 | 0 | 0 | 0 | 3 | 10.0 |

## Table 19. MATHEMATICS TEACHERS' TOTAL SCORE

| Rating | Carpentry |  | Brickmasonry |  | Meat Processing |  |
|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 2 | 6.5 | 2 | 6.5 | 3 | 10.0 |
| Unsatisfactory | 0 | 0 | 0 | 0 | 0 | 0 |
| Below Average | 4 | 12.9 | 3 | 9.7 | 2 | 6.7 |
| Average | 9 | 29.0 | 7 | 22.6 | 9 | 30.0 |
| Above Average | 14 | 45.2 | 20 | 61.3 | 13 | 43.3 |
| Superior | 2 | 6.5 | 0 | 0 | 3 | 10.0 |

## Table 20. TRADE TEACHERS' TOTAL SCORE

| Rating | Carpentry |  | Brickmasonry |  | Meat Processing |  |
|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 2 | 6.5 | 2 | 6.5 | 3 | 10.0 |
| Unsatisfactory | 0 | 0 | 1 | 3.2 | 0 | 0 |
| Below Average | 5 | 16.1 | 5 | 16.1 | 0 | 0 |
| Average | 9 | 29.0 | 11 | 35.5 | 11 | 36.7 |
| Above Average | 11 | 35.5 | 6 | 19.4 | 9 | 30.0 |
| Superior | 4 | 12.9 | 6 | 19.4 | 7 | 23.3 |

## Table 21. AVERAGE OF TOTAL SCORES

| Rating | Carpentry |  | Brickmasonry |  | Meat Processing |  |
|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 2 | 6.5 | 2 | 6.5 | 3 | 10.0 |
| Unsatisfactory | 0 | 0 | 0 | 0 | 0 | 0 |
| Below Average | 3 | 9.7 | 3 | 9.7 | 2 | 6.7 |
| Average | 12 | 38.7 | 12 | 38.7 | 8 | 26.7 |
| Above Average | 12 | 38.7 | 11 | 35.5 | 13 | 43.3 |
| Superior | 2 | 6.5 | 3 | 9.7 | 4 | 13.3 |

## COURSE PERFORMANCE (THIRD RATING)

### Table 22. PARTICIPATION (Response to Assignment)

| | Carpentry | | Brickmasonry | | Meat Processing | |
|---|---|---|---|---|---|---|
| Rating | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 2 | 6.5 | 2 | 6.5 | 4 | 13.3 |
| Unsatisfactory | 0 | 0 | 0 | 0 | 0 | 0 |
| Below Average | 4 | 12.9 | 1 | 3.2 | 1 | 3.3 |
| Average | 7 | 22.6 | 8 | 25.8 | 4 | 13.3 |
| Above Average | 12 | 38.7 | 11 | 35.5 | 9 | 30.0 |
| Superior | 6 | 19.4 | 9 | 29.0 | 12 | 40.0 |

### Table 23. PERFORMANCE AND QUALITY OF WORK

| | Carpentry | | Brickmasonry | | Meat Processing | |
|---|---|---|---|---|---|---|
| Rating | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 2 | 6.5 | 2 | 6.5 | 4 | 13.3 |
| Unsatisfactory | 2 | 6.5 | 0 | 0 | 0 | 0 |
| Below Average | 1 | 3.2 | 3 | 9.7 | 2 | 6.7 |
| Average | 12 | 38.7 | 12 | 38.7 | 12 | 36.7 |
| Above Average | 12 | 38.7 | 14 | 45.2 | 12 | 36.7 |
| Superior | 2 | 6.5 | 0 | 0 | 2 | 6.7 |

### Table 24. INDUSTRY

| | Carpentry | | Brickmasonry | | Meat Processing | |
|---|---|---|---|---|---|---|
| Rating | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 2 | 6.5 | 2 | 6.5 | 4 | 13.3 |
| Unsatisfactory | 1 | 3.2 | 0 | 0 | 0 | 0 |
| Below Average | 6 | 19.4 | 4 | 12.9 | 4 | 13.3 |
| Average | 6 | 19.4 | 11 | 35.5 | 6 | 20.0 |
| Above Average | 13 | 41.9 | 14 | 45.2 | 14 | 46.7 |
| Superior | 3 | 9.7 | 0 | 0 | 2 | 6.7 |

|  | Carpentry |  | Brickmasonry |  | Meat Processing |  |
|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent |
| Table 25. INITIATIVE |  |  |  |  |  |  |
| Rating |  |  |  |  |  |  |
| Not Given | 2 | 6.5 | 2 | 6.5 | 4 | 13.3 |
| Unsatisfactory | 2 | 6.5 | 2 | 6.5 | 0 | 0 |
| Below Average | 5 | 16.1 | 4 | 12.9 | 6 | 20.0 |
| Average | 11 | 35.5 | 11 | 35.5 | 8 | 26.7 |
| Above Average | 10 | 32.3 | 12 | 38.7 | 12 | 36.7 |
| Superior | 1 | 3.2 | 0 | 0 | 1 | 3.3 |
| Table 26. RESPONSIBILITY |  |  |  |  |  |  |
| Rating |  |  |  |  |  |  |
| Not Given | 2 | 6.5 |  | 6.5 | 4 | 13.3 |
| Unsatisfactory | 4 | 12.9 |  | 6.5 | 0 | 0 |
| Below Average | 3 | 9.7 |  | 16.1 | 2 | 6.7 |
| Average | 8 | 25.8 |  | 29.0 | 6 | 20.0 |
| Above Average | 11 | 35.5 |  | 35.5 | 15 | 50.0 |
| Superior | 3 | 9.7 |  | 6.5 | 3 | 10.0 |
| Table 27. ENGLISH TEACHERS' TOTAL SCORE |  |  |  |  |  |  |
| Rating |  |  |  |  |  |  |
| Not Given | 2 | 6.5 | 2 | 6.5 | 4 | 13.3 |
| Unsatisfactory | 1 | 3.2 | 0 | 0 | 0 | 0 |
| Below Average | 3 | 9.7 | 2 | 6.5 | 1 | 3.3 |
| Average | 13 | 41.9 | 9 | 29.0 | 6 | 20.0 |
| Above Average | 10 | 32.3 | 16 | 51.6 | 16 | 53.3 |
| Superior | 2 | 6.5 | 2 | 6.5 | 3 | 10.0 |

| | Carpentry | | Brickmasonry | | Meat Processing | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |

### Table 28. MATHEMATICS TEACHERS' TOTAL SCORE

| Rating | | | | | | |
|---|---|---|---|---|---|---|
| Not Given | 2 | 6.5 | 2 | 6.5 | 4 | 13.3 |
| Unsatisfactory | 4 | 12.9 | 1 | 3.2 | 0 | 0 |
| Below Average | 4 | 12.9 | 3 | 9.7 | 1 | 3.3 |
| Average | 11 | 35.5 | 11 | 35.5 | 9 | 30.0 |
| Above Average | 10 | 32.3 | 13 | 41.9 | 14 | 46.7 |
| Superior | 0 | 0 | 1 | 3.2 | 2 | 6.7 |

### Table 29. TRADE TEACHERS' TOTAL SCORE

| Rating | | | | | | |
|---|---|---|---|---|---|---|
| Not Given | 2 | 6.5 | 2 | 6.5 | 4 | 13.3 |
| Unsatisfactory | 1 | 3.2 | 0 | 0 | 0 | 0 |
| Below Average | 5 | 16.1 | 6 | 19.4 | 3 | 10.0 |
| Average | 5 | 16.1 | 8 | 25.8 | 9 | 30.0 |
| Above Average | 11 | 35.5 | 9 | 29.0 | 9 | 30.0 |
| Superior | 7 | 22.6 | 6 | 19.4 | 5 | 16.7 |

### Table 30. AVERAGE OF TOTAL SCORES

| Rating | | | | | | |
|---|---|---|---|---|---|---|
| Not Given | 2 | 6.5 | 2 | 6.5 | 4 | 13.3 |
| Unsatisfactory | 1 | 3.2 | 0 | 0 | 0 | 0 |
| Below Average | 4 | 12.9 | 3 | 9.7 | 1 | 3.3 |
| Average | 10 | 32.3 | 11 | 35.5 | 7 | 23.3 |
| Above Average | 11 | 35.5 | 13 | 41.9 | 13 | 43.3 |
| Superior | 3 | 9.7 | 2 | 6.5 | 4 | 13.3 |

## SOCIOMETRIC DESCRIPTION

### Table 31. JOB PARTNER CHOICE

| | Carpentry | | Brickmasonry | | Meat Processing | |
|---|---|---|---|---|---|---|
| Rating | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 2 | 6.5 | 2 | 6.5 | 4 | 13.3 |
| Star | 8 | 25.8 | 4 | 12.9 | 7 | 23.3 |
| Highly Regarded | 10 | 32.3 | 7 | 22.6 | 6 | 20.0 |
| Acceptable | 8 | 25.8 | 16 | 51.6 | 7 | 23.3 |
| Isolates | 3 | 9.7 | 2 | 6.5 | 6 | 20.0 |

### Table 32. ROOMMATE CHOICE

| | Carpentry | | Brickmasonry | | Meat Processing | |
|---|---|---|---|---|---|---|
| Rating | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 2 | 6.5 | 2 | 6.5 | 4 | 13.3 |
| Star | 6 | 19.4 | 5 | 16.1 | 8 | 26.7 |
| Highly Regarded | 9 | 29.0 | 8 | 25.8 | 4 | 13.3 |
| Acceptable | 11 | 35.5 | 13 | 41.9 | 9 | 30.0 |
| Isolates | 3 | 9.7 | 3 | 9.7 | 5 | 16.7 |

### Table 33. VISITOR IN THE HOME CHOICE

| | Carpentry | | Brickmasonry | | Meat Processing | |
|---|---|---|---|---|---|---|
| Rating | Number | Percent | Number | Percent | Number | Percent |
| Not Given | 2 | 6.5 | 2 | 6.5 | 4 | 13.3 |
| Star | 7 | 22.6 | 5 | 16.1 | 4 | 13.3 |
| Highly Regarded | 6 | 19.4 | 6 | 19.4 | 6 | 20.0 |
| Acceptable | 11 | 35.5 | 13 | 41.9 | 13 | 43.3 |
| Isolate | 5 | 16.1 | 5 | 16.1 | 3 | 10.0 |

## IN-PUT TEST SCORES

### TEACHERS' EXIT EVALUATION OF TRAINEES

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| **Table 1. OVERALL ADJUSTMENT** | | | | | | | | |
| Not Given | | 0.0 | 3 | 8.1 | 1 | 2.4 | 0 | 0.0 |
| Above Average | 3 | 42.9 | 9 | 24.3 | 20 | 47.6 | 1 | 25.0 |
| Average | | 0.0 | 17 | 45.9 | 17 | 40.5 | 2 | 50.0 |
| Below Average | 4 | 57.1 | 8 | 21.6 | 4 | 9.5 | 1 | 25.0 |
| **Table 2. ROTTER INCOMPLETE SENTENCES** | | | | | | | | |
| Not Given | 1 | 14.3 | 6 | 16.2 | 5 | 11.9 | 1 | 25.0 |
| 130 - 139 | 0 | 0.0 | 1 | 2.7 | 1 | 2.4 | 0 | 0.0 |
| 120 - 129 | 1 | 14.3 | 2 | 5.4 | 6 | 14.3 | 0 | 0.0 |
| 110 - 119 | 2 | 28.6 | 1 | 2.7 | 9 | 21.4 | 0 | 0.0 |
| 100 - 109 | 0 | 0.0 | 8 | 21.6 | 6 | 14.3 | 0 | 0.0 |
| 90 - 99 | 1 | 14.3 | 8 | 21.6 | 9 | 21.4 | 1 | 25.0 |
| 80 - 89 | 1 | 14.3 | 8 | 21.6 | 5 | 11.9 | 1 | 25.0 |
| 70 - 79 | 0 | 0.0 | 3 | 8.1 | 1 | 2.4 | 1 | 25.0 |
| 60 - 69 | 1 | 14.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| **Table 3. CASSEL LEVEL OF ASPIRATION** | | | | | | | | |
| Not Given | 1 | 14.3 | 1 | 2.7 | 1 | 2.4 | 1 | 25.0 |
| 0 - 19 | 0 | 0.0 | 2 | 5.4 | 2 | 4.8 | 0 | 0.0 |
| 20 - 39 | 0 | 0.0 | 1 | 2.7 | 1 | 2.4 | 0 | 0.0 |
| 40 - 59 | 3 | 42.9 | 5 | 13.5 | 2 | 4.8 | 0 | 0.0 |
| 60 - 79 | 3 | 42.9 | 14 | 37.8 | 8 | 19.0 | 3 | 75.0 |
| 80 - 99 | 0 | 0.0 | 5 | 13.5 | 19 | 45.2 | 0 | 0.0 |
| 100 - 119 | 0 | 0.0 | 6 | 16.2 | 5 | 11.9 | 0 | 0.0 |
| 120 - 139 | 0 | 0.0 | 2 | 5.4 | 2 | 4.8 | 0 | 0.0 |
| 140 and Above | 0 | 0.0 | 1 | 2.7 | 2 | 4.8 | 0 | 0.0 |

## Table 4. AGE

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| 20 - 24 Years | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 25 - 29 Years | 0 | 0.0 | 11 | 29.7 | 8 | 19.0 | 1 | 25.0 |
| 30 - 34 Years | 1 | 14.3 | 6 | 16.2 | 7 | 16.7 | 1 | 25.0 |
| 35 - 39 Years | 1 | 14.3 | 5 | 13.5 | 10 | 23.8 | 2 | 50.0 |
| 40 - 44 Years | 2 | 28.6 | 2 | 5.4 | 7 | 16.7 | 0 | 0.0 |
| 45 - 49 Years | 3 | 42.9 | 11 | 29.7 | 7 | 16.7 | 0 | 0.0 |
| 50 Years and Over | 0 | 0.0 | 2 | 5.4 | 3 | 7.1 | 0 | 0.0 |

## Table 5. REVISED BETA I.Q. SCORE

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Given | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 90 - 109 Average | 2 | 28.6 | 9 | 24.3 | 22 | 52.4 | 3 | 75.0 |
| 80 - 89 Below Average | 2 | 28.6 | 12 | 32.4 | 16 | 38.1 | 1 | 25.0 |
| 71 - 79 Inferior | 2 | 28.6 | 10 | 27.0 | 2 | 4.8 | 0 | 0.0 |
| 70 and Below - Defective | 1 | 14.3 | 6 | 16.2 | 2 | 4.8 | 0 | 0.0 |

## Table 6. GRAY ORAL READING TEST SCORE

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Given | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Below 2.0 | 1 | 14.3 | 0 | 0.0 | 1 | 2.4 | 0 | 0.0 |
| 2.0 - 3.9 | 2 | 28.6 | 2 | 5.4 | 3 | 7.1 | 0 | 0.0 |
| 4.0 - 5.9 | 2 | 28.6 | 15 | 40.5 | 12 | 28.6 | 1 | 25.0 |
| 6.0 - 7.9 | 2 | 28.6 | 6 | 16.2 | 6 | 14.3 | 1 | 25.0 |
| 8.0 - 9.9 | 0 | 0.0 | 6 | 16.2 | 9 | 21.4 | 0 | 0.0 |
| 10.0 - 11.9 | 0 | 0.0 | 0 | 0.0 | 4 | 9.5 | 0 | 0.0 |
| 12.0 and Above | 0 | 0.0 | 8 | 21.6 | 7 | 16.7 | 2 | 50.0 |

## Table 7. VERBAL REASONING SCORE

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Given | 1 | 14.3 | 1 | 2.7 | 0 | 0.0 | 0 | 0.0 |
| 25 - 31 | 0 | 0.0 | 3 | 8.1 | 2 | 4.8 | 0 | 0.0 |
| 32 - 38 | 3 | 42.9 | 7 | 18.9 | 8 | 19.0 | 0 | 0.0 |
| 39 - 45 | 0 | 0.0 | 15 | 40.5 | 16 | 38.1 | 0 | 0.0 |
| 46 - 52 | 3 | 42.9 | 7 | 18.9 | 10 | 23.8 | 2 | 50.0 |
| 53 - 59 | 0 | 0.0 | 2 | 5.4 | 4 | 9.5 | 1 | 25.0 |
| 60 - 66 | 0 | 0.0 | 2 | 5.4 | 2 | 4.8 | 1 | 25.0 |

## Table 8. NON-VERBAL REASONING

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Given | 1 | 14.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 20 and Below | 3 | 42.9 | 4 | 10.8 | 1 | 2.4 | 0 | 0.0 |
| 21 - 27 | 1 | 14.3 | 12 | 32.4 | 9 | 21.4 | 1 | 25.0 |
| 28 - 34 | 2 | 28.6 | 14 | 37.8 | 14 | 33.3 | 1 | 25.0 |
| 35 - 41 | 0 | 0.0 | 6 | 16.2 | 16 | 38.1 | 2 | 50.0 |
| 42 - 48 | 0 | 0.0 | 1 | 2.7 | 1 | 2.4 | 0 | 0.0 |
| 49 - 55 | 0 | 0.0 | 0 | 0.0 | 1 | 2.4 | 0 | 0.0 |

## Table 9. CLOSURE FLEXIBILITY

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Given | 1 | 14.3 | 2 | 5.4 | 0 | 0.0 | 0 | 0.0 |
| Below 23 | 0 | 0.0 | 0 | 0.0 | 1 | 2.4 | 0 | 0.0 |
| 23 - 28 | 1 | 14.3 | 3 | 8.1 | 3 | 7.1 | 0 | 0.0 |
| 29 - 34 | 5 | 71.4 | 22 | 59.5 | 18 | 42.9 | 1 | 25.0 |
| 35 - 40 | 0 | 0.0 | 6 | 16.2 | 17 | 40.5 | 3 | 75.0 |
| 41 - 46 | 0 | 0.0 | 2 | 5.4 | 2 | 4.8 | 0 | 0.0 |
| 47 - 52 | 0 | 0.0 | 2 | 5.4 | 1 | 2.4 | 0 | 0.0 |
| 53 - 58 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Table 10. CLOSURE SPEED | | | | | | | | |
| Not Given | 1 | 14.3 | 2 | 5.4 | 0 | 0.0 | 0 | 0.0 |
| 18 - 23 | 2 | 28.6 | 3 | 8.1 | 0 | 0.0 | 1 | 25.0 |
| 24 - 29 | 3 | 42.9 | 4 | 10.8 | 12 | 28.6 | 0 | 0.0 |
| 30 - 35 | 0 | 0.0 | 11 | 29.7 | 8 | 19.0 | 1 | 25.0 |
| 36 - 41 | 0 | 0.0 | 10 | 27.0 | 9 | 21.4 | 1 | 25.0 |
| 42 - 47 | 1 | 14.3 | 4 | 10.8 | 6 | 14.3 | 0 | 0.0 |
| 48 - 53 | 0 | 0.0 | 3 | 8.1 | 5 | 11.9 | 1 | 25.0 |
| 54 - 59 | 0 | 0.0 | 0 | 0.0 | 2 | 4.8 | 0 | 0.0 |
| Table 11. PERCEPTUAL SPEED | | | | | | | | |
| Not Given | 1 | 14.3 | 3 | 8.1 | 1 | 2.4 | 0 | 0.0 |
| Below 22 | 3 | 42.9 | 11 | 29.7 | 4 | 9.5 | 1 | 25.0 |
| 22 - 29 | 0 | 0.0 | 4 | 10.8 | 4 | 9.5 | 0 | 0.0 |
| 30 - 37 | 1 | 14.3 | 9 | 24.3 | 15 | 35.7 | 1 | 25.0 |
| 38 - 45 | 2 | 28.6 | 8 | 21.6 | 9 | 21.4 | 1 | 25.0 |
| 46 - 53 | 0 | 0.0 | 1 | 2.7 | 7 | 16.7 | 0 | 0.0 |
| 54 - 61 | 0 | 0.0 | 1 | 2.7 | 1 | 2.4 | 1 | 25.0 |
| 62 - 69 | 0 | 0.0 | 0 | 0.0 | 1 | 2.4 | 0 | 0.0 |
| Table 12. WORD FLUENCY | | | | | | | | |
| Not Given | 0 | 0.0 | 8 | 21.6 | 3 | 7.1 | 0 | 0.0 |
| Below 20 | 5 | 71.4 | 12 | 32.4 | 11 | 26.2 | 0 | 0.0 |
| 20 - 27 | 2 | 28.6 | 6 | 16.2 | 12 | 28.6 | 1 | 25.0 |
| 28 - 35 | 0 | 0.0 | 7 | 18.9 | 14 | 33.3 | 1 | 25.0 |
| 36 - 43 | 0 | 0.0 | 3 | 8.1 | 1 | 2.4 | 2 | 50.0 |
| 44 - 51 | 0 | 0.0 | 1 | 2.7 | 1 | 2.4 | 0 | 0.0 |
| 52 - 59 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

### Table 13. UNDERSTANDING COMMUNICATIONS - Exit Evaluation

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Given | 1 | 14.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 24 - 29 | 4 | 57.1 | 14 | 37.8 | 15 | 35.7 | 0 | 0.0 |
| 30 - 35 | 2 | 28.6 | 14 | 37.8 | 14 | 33.3 | 1 | 25.0 |
| 36 - 41 | 0 | 0.0 | 4 | 10.8 | 8 | 19.0 | 2 | 50.0 |
| 42 - 47 | 0 | 0.0 | 5 | 13.5 | 4 | 9.5 | 0 | 0.0 |
| 48 - 53 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 25.0 |
| 54 - 59 | 0 | 0.0 | 0 | 0.0 | 1 | 2.4 | 0 | 0.0 |

### Table 14. NICHOLS PROFICIENCY - Exit Evaluation

| Skill Score (1st) | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Reported | 2 | 28.6 | 3 | 8.1 | 2 | 4.8 | 0 | 0.0 |
| Under 50 Unsatisfactory | 4 | 57.1 | 28 | 75.7 | 29 | 69.0 | 2 | 50.0 |
| 50 - 54 Below Average | 1 | 14.3 | 1 | 2.7 | 6 | 14.3 | 0 | 0.0 |
| 55 - 59 Average | | | 5 | 13.5 | 1 | 2.4 | 2 | 50.0 |
| 60 - 64 Above Average | | | | | 4 | 9.5 | 0 | 0.0 |
| 65 and Above Superior | | | | | | | | |

### Table 15. MECHANICAL MOVEMENTS

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Given | 0 | 0.0 | 0 | 0.0 | 1 | 2.4 | 0 | 0.0 |
| 20 - 29 Very Low | 2 | 28.6 | 3 | 8.1 | 2 | 4.8 | 0 | 0.0 |
| 30 - 39 Low | 1 | 14.3 | 15 | 40.5 | 8 | 19.0 | 2 | 50.0 |
| 40 - 60 Average | 4 | 57.1 | 19 | 51.4 | 31 | 73.8 | 2 | 50.0 |
| 61 - 70 High | | | | | | | 0 | 0.0 |
| 71 - 80 Very High | | | | | | | 0 | 0.0 |

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Table 16. INTUITIVE MECHANICS | | | | | | | | |
| Not Given | 2 | 28.6 | 6 | 16.2 | 1 | 2.4 | 0 | 0.0 |
| 20 - 29 Very Low | 0 | 0.0 | 7 | 18.9 | 0 | 0.0 | 0 | 0.0 |
| 30 - 39 Low | 1 | 14.3 | 24 | 64.9 | | 23.8 | 0 | 0.0 |
| 40 - 60 Average | 4 | 57.1 | 0 | 0.0 | 30 | 71.4 | 4 | 100.0 |
| 61 - 70 High | | | | | | | | |
| 71 - 80 Very High | | | | | | | | |
| Table 17. FLAGS: A TEST IN SPACE THINKING | | | | | | | | |
| Not Given | 2 | 28.6 | 7 | 18.9 | 4 | 9.5 | 0 | 0.0 |
| 20 - 29 Very Low | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 30 - 39 Low | 4 | 57.1 | 17 | 45.9 | 15 | 35.7 | 2 | 50.0 |
| 40 - 60 Average | 1 | 14.3 | 13 | 35.1 | 23 | 54.8 | 2 | 50.0 |
| 61 - 70 High | | | | | | | | |
| 71 - 80 Very High | | | | | | | | |
| Table 18. (HIGHEST INTEREST) MINNESOTA VOCATIONAL INTEREST INVENTORY | | | | | | | | |
| Not Given | | 0.0 | 1 | 2.7 | 0 | 0.0 | 0 | 0.0 |
| Mechanical | | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Health Service | | 0.0 | 2 | 5.4 | 1 | 2.4 | 0 | 0.0 |
| Office Work | 3 | 42.9 | 7 | 18.9 | 8 | 19.0 | 0 | 0.0 |
| Electronics | | 0.0 | 1 | 2.7 | 2 | 4.8 | 1 | 25.0 |
| Food Service | | 0.0 | 3 | 8.1 | 4 | 9.5 | 0 | 0.0 |
| Carpentry | | 0.0 | 1 | 2.7 | 1 | 2.4 | 0 | 0.0 |
| Sales Office | | 0.0 | 3 | 8.1 | 1 | 2.4 | 1 | 25.0 |
| Clean Hands | 4 | 57.1 | 19 | 51.4 | 23 | 54.8 | 2 | 50.0 |
| Outdoors | | 0.0 | 0 | 0.0 | 2 | 4.8 | 0 | 0.0 |

Table 19. (LOWEST INTEREST) MINNESOTA VOCATIONAL INTEREST INVENTORY

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Given | 1 | 14.3 | 4 | 10.8 | 1 | 2.4 | 0 | 0.0 |
| Mechanical | 2 | 28.6 | 16 | 43.2 | 11 | 26.2 | 1 | 25.0 |
| Health Service | 0 | 0.0 | 0 | 0.0 | 3 | 7.1 | 0 | 0.0 |
| Office Work | 1 | 14.3 | 0 | 0.0 | 3 | 7.1 | 0 | 0.0 |
| Electronics | 0 | 0.0 | 2 | 5.4 | 6 | 14.3 | 1 | 25.0 |
| Food Service | 0 | 0.0 | 0 | 0.0 | 1 | 2.4 | 0 | 0.0 |
| Carpentry | 2 | 28.6 | 4 | 10.8 | 7 | 16.7 | 0 | 0.0 |
| Sales Office | 0 | 0.0 | 1 | 2.7 | 1 | 2.4 | 0 | 0.0 |
| Clean Hands | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 25.0 |
| Outdoors | 1 | 14.3 | 10 | 27.0 | 9 | 21.4 | 1 | 25.0 |

## WORK INTEREST INDEX

Table 20. WORK INTEREST FLEXIBILITY SCORE - Exit Evaluation

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Given | 1 | 14.3 | 4 | 10.8 | 1 | 2.4 | 0 | 0.0 |
| 20 - 29 Very Low | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 30 - 39 Low | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 40 - 60 Average | 4 | 57.1 | 21 | 56.8 | 24 | 57.1 | 4 | 100.0 |
| 61 - 70 High | 1 | 14.3 | 11 | 29.7 | 14 | 33.3 | 0 | 0.0 |
| 71 - 80 Very High | 1 | 14.3 | 1 | 2.7 | 3 | 7.1 | 0 | 0.0 |

## WORK INTEREST INDEX

Table 21. WORK INTEREST ASPIRATION LEVEL - Exit Evaluation

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Given | 1 | 14.3 | 4 | 10.8 | 1 | 2.4 | 0 | 0.0 |
| 20 - 29 Very Low | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 30 - 39 Low | 0 | 0.0 | 4 | 10.8 | 4 | 9.5 | 0 | 0.0 |
| 40 - 60 Average | 6 | 85.7 | 28 | 75.7 | 37 | 88.1 | 4 | 100.0 |
| 61 - 70 High | 0 | 0.0 | 1 | 2.7 | 0 | 0.0 | 0 | 0.0 |
| 71 - 80 Very High | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |

Table 22. AVERAGE OF TOTAL SCORE - THIRD RATING

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Given | 0 | 0.0 | 4 | 10.8 | 2 | 4.8 | 0 | 0.0 |
| Unsatisfactory | 1 | 14.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Below Average | 6 | 85.7 | 2 | 5.4 | 0 | 0.0 | 0 | 0.0 |
| Average | 0 | 0.0 | 20 | 54.1 | 8 | 19.0 | 0 | 0.0 |
| Above Average | 0 | 0.0 | 9 | 24.3 | 27 | 64.3 | 1 | 25.0 |
| Superior | 0 | 0.0 | 1 | 2.7 | 5 | 11.9 | 3 | 75.0 |

Table 23. JOB PARTNER CHOICE - Exit Evaluation

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Given | 0 | 0.0 | 4 | 10.8 | 2 | 4.8 | 0 | 0.0 |
| Star | 0 | 0.0 | 4 | 10.8 | 13 | 31.0 | 2 | 50.0 |
| Highly Regarded | 1 | 14.3 | 8 | 21.6 | 12 | 28.6 | 2 | 50.0 |
| Acceptable | 4 | 57.1 | 12 | 32.4 | 15 | 35.7 | 0 | 0.0 |
| Isolate | 2 | 28.6 | 9 | 24.3 | 0 | 0.0 | 0 | 0.0 |

Table 24. ROOMMATE CHOICE - Exit Evaluation

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Given | 0 | 0.0 | 4 | 10.8 | 2 | 4.8 | 0 | 0.0 |
| Star | 0 | 0.0 | 4 | 10.8 | 12 | 28.6 | 3 | 75.0 |
| Highly Regarded | 1 | 14.3 | 8 | 21.6 | 12 | 28.6 | 0 | 0.0 |
| Acceptable | 3 | 42.9 | 14 | 37.8 | 15 | 35.7 | 1 | 25.0 |
| Isolate | 3 | 42.9 | 7 | 18.9 | 1 | 2.4 | 0 | 0.0 |

Table 25. VISITOR IN HOME CHOICE - Exit Evaluation

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Given | 0 | 0.0 | 4 | 10.8 | 2 | 4.8 | 0 | 0.0 |
| Star | 0 | 0.0 | 6 | 16.2 | 9 | 21.4 | 1 | 25.0 |
| Highly Regarded | 0 | 0.0 | 6 | 16.2 | 11 | 26.2 | 1 | 25.0 |
| Acceptable | 2 | 28.6 | 14 | 37.8 | 19 | 45.2 | 2 | 50.0 |
| Isolate | 5 | 71.4 | 7 | 18.9 | 1 | 2.4 | 0 | 0.0 |

### Table 26. ABSENTEE RECORD - Exit Evaluation

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Given | 0 | 0.0 | 4 | 10.8 | 3 | 7.1 | 0 | 0.0 |
| Less than 5 Days | 0 | 0.0 | 7 | 18.9 | 10 | 23.8 | 3 | 75.0 |
| 5 - 9 | 0 | 0.0 | 8 | 21.6 | 9 | 21.4 | 1 | 25.0 |
| 10 - 14 | 0 | 0.0 | 2 | 5.4 | 11 | 26.2 | 0 | 0.0 |
| 15 - 19 | 0 | 0.0 | 5 | 13.5 | 3 | 7.1 | 0 | 0.0 |
| 20 - 24 | 0 | 0.0 | 1 | 2.7 | 0 | 0.0 | 0 | 0.0 |
| 25 or Over | 7 | 100.0 | 10 | 27.0 | 6 | 14.3 | 0 | 0.0 |

### Table 27. PARTICIPATION - Exit Evaluation

| Rating | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Given | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Unsatisfactory | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Below Average | 3 | 42.9 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Average | 4 | 57.1 | 9 | 24.3 | 2 | 4.8 | 0 | 0.0 |
| Above Average | 0 | 0.0 | 28 | 75.7 | 21 | 50.0 | 0 | 0.0 |
| Superior | 0 | 0.0 | 0 | 0.0 | 19 | 45.2 | 4 | 100.0 |

### Table 28. PERFORMANCE - Exit Evaluation

| Rating | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Not Given | 0 | 0.0 | 1 | 2.7 | 0 | 0.0 | 0 | 0.0 |
| Unsatisfactory | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Below Average | 6 | 85.7 | 5 | 13.5 | 0 | 0.0 | 0 | 0.0 |
| Average | 1 | 14.3 | 28 | 75.7 | 11 | 26.2 | 0 | 0.0 |
| Above Average | 0 | 0.0 | 3 | 8.1 | 26 | 61.9 | 0 | 0.0 |
| Superior | 0 | 0.0 | 0 | 0.0 | 5 | 11.9 | 4 | 100.0 |

### Table 29. INDUSTRY - Exit Evaluation

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| Rating | No. | % | No. | % | No. | % | No. | % |
| Not Given | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Unsatisfactory | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Below Average | 5 | 71.4 | 2 | 5.4 | 0 | 0.0 | 0 | 0.0 |
| Average | 2 | 28.6 | 26 | 70.3 | 3 | 7.1 | 0 | 0.0 |
| Above Average | 0 | 0.0 | 9 | 24.3 | 37 | 88.1 | 1 | 25.0 |
| Superior | 0 | 0.0 | 0 | 0.0 | 2 | 4.8 | 3 | 75.0 |

### Table 30. INITIATIVE - Exit Evaluation

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| Rating | No. | % | No. | % | No. | % | No. | % |
| Not Given | | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Unsatisfactory | 1 | 14.3 | 1 | 2.7 | 0 | 0.0 | 0 | 0.0 |
| Below Average | 6 | 85.7 | 9 | 24.3 | 0 | 0.0 | 0 | 0.0 |
| Average | 0 | 0.0 | 26 | 70.3 | 18 | 42.9 | 0 | 0.0 |
| Above Average | 0 | 0.0 | 1 | 2.7 | 24 | 57.1 | 3 | 75.0 |
| Superior | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 25.0 |

### Table 31. RESPONSIBILITY - Exit Evaluation

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| Rating | No. | % | No. | % | No. | % | No. | % |
| Not Given | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Unsatisfactory | 1 | 14.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Below Average | 5 | 71.4 | 6 | 16.2 | 0 | 0.0 | 0 | 0.0 |
| Average | 1 | 14.3 | 26 | 70.3 | 9 | 21.4 | 0 | 0.0 |
| Above Average | 0 | 0.0 | 5 | 13.5 | 32 | 76.2 | 1 | 25.0 |
| Superior | 0 | 0.0 | 0 | 0.0 | 1 | 2.4 | 3 | 75.0 |

Table 32. MATHEMATICS TEACHERS' TOTAL SCORE

| | Below Average | | Average | | Above Average | | Superior | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Rating | | | | | | | | |
| Not Given | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Unsatisfactory | 5 | 71.4 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Below Average | 2 | 28.6 | 12 | 32.4 | 0 | 0.0 | 0 | 0.0 |
| Average | 0 | 0.0 | 20 | 54.1 | 13 | 31.0 | 0 | 0.0 |
| Above Average | 0 | 0.0 | 5 | 13.5 | 28 | 66.7 | 2 | 50.0 |
| Superior | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 50.0 |

# MDT FACULTY PRE-PLANNING ACTIVITIES

Classroom - Division of Architecture
Willcox "A"

June 6, 1966

| | |
|---|---|
| 8:30 - 10.00 | Welcome - Dean J.A. Welch, Mechanical Industries<br>Overview - Dr. W. Vincent Payne, Director MDT Project<br>Questions |
| 10:00 - 10:15 | Break |
| 10:15 - 11:30 | Lecture - Principles of Education, Materials and Diagnostic Instruments - Mrs. G.C. Poole<br>Questions |
| 11:30 - 1:30 | Lunch |
| 1:30 - 4:30 | Workshop - Principles of Education, Materials and Diagnostic Instruments - Mrs. G.C. Poole |

June 7, 1966

| | |
|---|---|
| 8:30 - 11:00 | Lecture - Some Principles of Teaching Adults - Methods, Procedures and Techniques - Dr. A.P. Torrence<br>Questions |
| 11:00 - 1.30 | Lunch |
| 1:30 - 4:30 | Workshop - Principles of Teaching Adults - Dr. A.P. Torrence |

D

June 8, 1966

| | |
|---|---|
| 8:30 - 11:00 | Lecture - Guidance and Counseling for the Disadvantaged Adult - Dr. Emma Bragg |
| | Questions |
| 11:00 - 1:30 | Lunch |
| 1:30 - 4:30 | Workshop - Guidance and Counseling for the disadvantaged Adult - Dr. Emma Bragg |

June 9, 1966

| | |
|---|---|
| 8:30 - 11:00 | Lecture - The Research Design - Dr. Lewis Jones |
| | Questions |
| 11:00 - 1:30 | Lunch |
| 1:30 - 4:30 | Workshop - The Research Design - Dr. Lewis Jones |

June 10, 1966

| | |
|---|---|
| 8:30 - 11:00 | Lecture - The Use and Operation of Audio-Visual Aids<br>Mr. Walter Scott |
| | Questions |
| 11:00 - 1:30 | Lunch |
| 1:30 - 4:30 | Workshop - The Use and Operation of Audio-Visual Aids - Mr. Walter Scott |

June 13, 1966

| | |
|---|---|
| 8:30 - 12:00 | General Meeting - Dr. Payne Presiding<br>Discussion of the following:<br>1. Job Description<br>2. Scheduling |

3. Attendance Keeping

4. Evaluation Methods and Procedures

5. Outline for Writing Reports

6. Teaching Materials and Interrelated Methods

7. Counselor - Teacher Relationships and Responsibilities

8. Disciplinary Action - Trainees

9. General Expectations:

    a. Director

    b. Associate Director

    c. Director of Research

    d. Counselor Director

    e. General Education Coordinator

    f. Technical Skills Coordinator

12:00 - 1:30 Lunch

1:30 - 4:30 Group Sessions - General Discussion on Methods and Procedures

1. Counseling

2. English - Communications Specialist

3. Mathematics - Number Skills Specialist

June 14, 1966

9:00 - 12:00 Workshop Involving the Following:

1. Personnel Managers from Related Trade Areas
2. Labor Union Officials
3. Vocational Education Officials
4. Employment Service Officials

How These Four Agencies Can Assist in Employment of Persons Completing the MDT Project

Overview

General Round Table Discussion

1. Expectation of Personnel Managers
2. Labor Union Expectations
3. Vocational Education Officials
4. Employment Service Officials

12:30 - 1:30 Lunch - Dorothy Hall Dining Room

1:30 - 4:30 Workshop Continued

Conclusions

1. Personnel Managers
2. Labor Union Officials
3. Vocational Education Officials
4. Employment Service Officials

June 15, 1966 — Meeting of Vocational, Basic Education, and Counselors in Groups to Coordinate Plans for Keeping Teaching Materials and Procedures Related:

Schedule

| | English | Mathematics | Counselors |
|---|---|---|---|
| 8:00 - 10:00 | Carpentry & Brickmasonry | Nurse Aide | Meat Processing |
| 10:00 - 10:15 | Break | | |
| 10:15 - 12:15 | Meat Processing | Carpentry & Brickmasonry | Nurse Aide |
| 12:15 - 2:00 | Lunch | | |
| 2:00 - 4:00 | Nurse Aide | Meat Processing | Carpentry & Brickmasonry |

June 16, 1966

8:30 - 12:30 Workshop - Involving Basic Education, Vocational Education and Counseling Procedures

Discussion of Methods and Techniques to be used in Relating the Various Trade Areas to Basic Education

1. English - Carpentry and Brickmasonry
2. English - Meat Processing
3. English - Nurse Aide

12:00 - 1:30 Lunch

1:30 - 4:30 Discussion - Open (Workshop Continued)

1. Mathematics - Meat Processing
2. Mathematics - Carpentry and Brickmasonry
3. Mathematics - Nurse Aide

Discussion - Open

1. Counseling - Nurse Aide
2. Counseling - Carpentry and Brickmasonry
3. Counseling - Meat Processing

Summary

| | |
|---|---|
| June 17, 1966 | Time to be used for individual planning and group sessions as acheduled by the Director, Associate Director or the General Education Coordinator. |

# TRAINEE ORIENTATION WEEK

## SCHEDULE OF ACTIVITIES

### June 20, 1966

8:30 - 12:00 General Meeting - Willcox Hall Auditorium

Welcome .................. Dr. W. Vincent Payne
Director MDT Project

Introduction of Staff

Assist Trainees in the Following:

- Room Assignments
- Meal Cards
- Policies and Practices of the Institute
- Car Registration

12:00 - 1:00 Lunch

1:00 - 2:30 Tour of Campus

2:30 - 4:30 Free for Personal Adjustment and Relaxation

### June 21, 1966

8:30 - 10:30 Welcome Program - Willcox Hall Auditorium

Opening Prayer.......Dr. Andrew L. Johnson
Chaplain, Tuskegee Institute

Overview of OMPER Project.... Mr. J .A. Welch, Dean
School of Mechanical Industries

Music

Introduction of Speaker...... Dr. W. Vincent Payne

Welcome Address........Dr. Andrew P. Torrence
Dean of Academic Affairs

Music

Two Minute Remarks:

Mrs. Miltren L. Hardwick of TICEP
Representing Dr. P. Bertrand Phillips

Mrs. Elizabeth L. Wright
Director of the College Union

Dr. Andrew L. Johnson
Chaplain of Tuskegee Institute

Dr. B.D. Mayberry, Dean
School of Agriculture

Closing Prayer.............Dr. Andrew L. Johnson

| | |
|---|---|
| 10:30 - 12:00 | Get Acquainted Session |
| 12:00 - 2:00 | Lunch and Relaxation |
| 2:00 - 4:30 | Trade Overview: Groups will rotate as scheduled to the vocational shops for inspection and demonstrations |

June 22, 1966

| | |
|---|---|
| 8:30 - 10:00 | General Discussion of Tuskegee Institute and MDT Policies as Outlined in Handbook: Questions, Answers and Emphasis |
| 10:00 - 12:00 | Workshop to Teach Trainees Proper Way to Complete Allowance Forms |
| 12:00 - 2:00 | Lunch and Relaxation |

1:00 - 4:30 Iowa Test of Basic Skills
Meat Processing and Nursing - Food Processing Auditorium

Carpentry - Milbank Hall Auditorium

## June 23, 1966

8:30 - 12:00 Group Counseling Sessions

1. Mooney Problem Check Lists
2. Miscellaneous Counseling Activities
   Farm Mechanization Building

12:00 - 1:00 Lunch

1:00 - 4:30 Short Class Dry Run

1. Meet classes for fifteen minutes to allow trainees to become familiar with classroom teachers
2. Allow teachers to establish class rolls and meet trainees

## June 24, 1966

8:00 - 12:00 Counseling Group Sessions

1. Trade Proficiency Test
2. Miscellaneous Counseling Activities
   Farm Mechanization Building

12:00 - 1:00 Lunch

1:00 - 2:00 Social Hour - Farm Mechanization Building

FILMS FOR ADULT GROUPS

| | |
|---|---|
| "Developing Your Character" | Audio-Visual Center<br>Florida State University<br>Tallahassee, Florida |
| "Improving Your Personality" | " |
| "Personal Problems" | " |
| "Feeling of Hostility" | " |
| "Search for Happiness" | " |
| "Importance of Goals" | " |
| "Personality Conflict" | " |
| "Social Acceptability" | " |
| "Emotional Maturity" | " |
| "Facing Reality" | " |
| "Personality and Emotions" | " |
| "Belonging to the Group" | " |
| "Marriage is a Partnership" | " |
| "Making a Decision in the Family" | " |
| "Date With Your Family" | " |
| "Financial Planning" | " |
| "Finding Your Life Work" | " |
| "Personal Qualities for Job Success" | " |
| "Anger at Work" | " |

| | |
|---|---|
| "Employment Interview" | Audio-Visual Center<br>Florida State University<br>Tallahassee, Florida |
| "Community Responsibilities" | " |
| "Community Health and You" | " |
| "Alcoholism" | " |
| "Quacks and Nostrums" | " |
| "Preparation for Later Years" | " |
| "Getting a Job" | " |
| "You and Your Work" | " |
| "Marriage and the Family"<br>(Family - USA No. SFP-789a) | Department of Air Sciences<br>Tuskegee Institute |
| "Marriage and Family Living"<br>(No. SFP-794d) | " |
| "Family - USA - A Complex Society"<br>(No. SFP-789d) | " |
| "Family of Strangers"<br>(No. SFP-889) | " |
| "Who's Building Character"<br>(No. SFP-890) | " |
| "The Way - Ceiling 5,000"<br>(No. SFP-807e) | " |
| "Responsibility - Work or Home"<br>(No. SFP-860) | " |
| "Pressure" (No. SFP-817) | " |
| "The Secret" (No. SFP-818) | " |

| | |
|---|---|
| "Teenager's Parents" (No. SFP-848) | Department of Air Sciences<br>Tuskegee Institute |
| "Buyer's Choice" (No. SFP-850) | " |
| "Personal Integrity" (TF-No. 162518) | Department of Military Science<br>Tuskegee Institute |
| "Truth" (TF-No. 162887) | " |
| "Are You Really A Man" (TF-No. 16-2738) | " |
| "The Real Person" (TF-No. 16-3099) | " |
| "Self Discipline" (TF-No. 16-2741) | " |
| "Clean Speech" (TF-No. 16-3245) | " |
| "Courage" (TF-No. 16-3243) | " |
| "Marriage" (TF-No. 16-2883) | " |
| "It's Your Money" (MF-No. 16-9912) | " |
| "Government Is Your Business" (MF-No. 16-7862) | " |
| "Now We Are Parents" (MF-No. 16-5012) | " |
| "In Time of Trouble" (MF-No. 16-5013) | " |
| "Love Thy Neighbor" (MF-No. 16-9080) | " |
| "Family" (TF-No. 16-2522) | " |

# COMMUNITY INVOLVEMENT QUESTIONNAIRE
Counseling and Guidance Department
OMPER Project
Tuskegee Institute, Alabama

This questionnaire is designed for the purpose of obtaining information relevant to the community involvement of trainees in OMPER Project. This information will be used as supplementary data for conducting a community experimental program.

Please give the information requested as honestly and completely as possible. Use pencil in filling blanks.

Name______________________________________Date____________

Address________________________________________________________
City and State County St., Box or Route

I. Which of the following organizations are you a member of?

1. _____ Burial Society

2. _____ Elks

3. _____ Other Fraternal order

4. _____ Masons

5. _____ PTA

6. List any other organization(s) that you are a member of:

________________________________________________

________________________________________________

________________________________________________

II. What church do you attend?

1. Name______________________________

2. Location____________________________

3. Are you a member of this church? Yes___; No______.

4. Is this the family church? Yes___; No______.

III. What school do your children attend?

1. Name______________________________

2. Location____________________________

IV. What do you do for recreation?________________________

________________________________________________

________________________________________________

1. Where do you go for recreation? (Give name of town or place).

____________________________________________

V. Where is your trading for groceries done?

1. Name of store________________________

2. Location____________________________

VI. Where do you go for medical care at home?

1. Location____________________________

VII. When you worked, (full-time or part-time) where did you work?

1. Kind of work_________________________

2. Location____________________________

OMPER PROJECT
Tuskegee Institute
Tuskegee Institute, Alabama

## Interview Schedule

Date____________________

Interviewee____________________

Interviewer____________________

This interview schedule is designed for the purpose of securing information from the wives of trainees who are enrolled in OMPER Project: This information will be used in a research study which involves a community experimental program.

1. How was the decision made for your husband to take part in the program?

    __________ by you
    __________ by your husband
    __________ by you and your husband both
    __________ by other family members
    __________ by others

2. How do you feel about the training your husband is receiving in the program?

    __________ very enthusiastic
    __________ enthusiastic, but will await outcome
    __________ outcome does not matter
    __________ will do no good
    __________ undecided

3. Do you feel that the training your husband is receiving will:

    __________ improve family living
    __________ provide better job opportunity and earnings for husband
    __________ provide about the same level of income as before
    __________ undecided

4. Did your husband discuss joining the project with you?

__________ yes
__________ no

5. When the training was considered, did you:

__________ encourage it
__________ leave it to husband
__________ discourage it

6. Do you feel that the training your husband is receiving is:

__________ very important
__________ of limited importance
__________ not important
__________ undecided

7. Since your husband has been a trainee in the program have you had to take on more responsibilities?

__________ yes
__________ no

8. Has the family income increased since your husband has been in the program?

__________ yes
__________ no

9. Do you work now?

__________ yes
__________ no

10. Did you work before your husband became a trainee?

__________ yes
__________ no

11. Did participation in the program by your husband bring about any transportation problems for other family members, including you?

__________ yes
__________ no

12. Has the use of the family car by your husband:

__________ helped social life of family
__________ hindered social life of family
__________ social life of family is about the same
__________ undecided

13. Is your husband active in community organizations and activities?

__________ yes If yes, what organization(s)__________________
__________ no

14. Do you like the community that you are now living?

__________ yes
__________ no

15. In regard to family business, do you:

__________ let husband handle affairs alone
__________ you handle affairs alone
__________ you and husband both share in handling affairs

16. Who disciplines the children?

__________ you
__________ husband
__________ share responsibility

17. Do you feel that your husband is:

__________ strong and capable
__________ stubborn
__________ uncertain and indecisive
__________ weak and easily led by other people

18. Do your children:

__________ come to you with most of their problems
__________ go to father with most of their problems
__________ others (specify)______________________

19. What are your feelings toward the location of the training center?

__________ should be within reasonable driving distance
__________ location is not important
__________ training is more important than location
__________ undecided

20. Would you be willing to move to a new location if your husband got a job: (Check appropriate ones)

__________ in another county
__________ in a city in the county you now live in
__________ in a city in another county
__________ in another state

21. What do you like best about your community?__________________

________________________________________

________________________________________

22. What do you like least about your community?__________________

________________________________________

________________________________________

23. What do you think you can do to help improve your community?

Spouse?________________________________

________________________________________

________________________________________

24. Do you know where any of the following agencies are located or how to contact them? If so check the ones you know.

__________ Farm Home Administration
__________ Soil Conservation Service
__________ County Extension Agent
__________ Sheriff's Office
__________ Fire Department
__________ Board of Revenue
__________ Tax Collector
__________ Health Department

25. Do you have any of the following in your community? (Within 5 miles of your home)

__________ community center
__________ playground
__________ health center
__________ public or private library
__________ 4-H Club
__________ Boy or Girl Scouts
__________ social club
__________ newspaper route
__________ Headstart
__________ VISTA (Volunteers in Service to America)
__________ CAP (Community Action Program)

OMPER PROJECT
TUSKEGEE INSTITUTE
TUSKEGEE INSTITUTE, ALABAMA

## RELOCATION QUESTIONNAIRE

1. Name________________________ 2. Date________________
(Last) (First)

3. Address____________________________________
(Number and Street) (City) (County) (State)

4. Telephone No.__________ 5. Height______ 6. Weight________

7. Marital Status: ☐ Single ☐ Married ☐ Other

8. No. of Children______ 9. Highest Grade You Completed in School ___

10. Would you like for OMPER to locate a job for you?____Yes ____No

11. Do you own your home? ____Yes ____No

12. Do you have:

| | | | |
|---|---|---|---|
| A. | Driver's License | Yes____ | No____ |
| B. | Car | Yes____ | No____ |
| C. | Truck | Yes____ | No____ |
| D. | Tools | Yes____ | No____ |

13. What kind of job are you interested in locating?

A. First Choice________________________
B. Second Choice_______________________

14. Do you expect to be recalled to work or become self-employed?

Yes____ No____ Uncertain____

15. Where were you employed before entering OMPER Program?________

______________________________________________

16. How long were you employed there?____________________
(Years and Months)

17. Approximately how much were you earning?____________________

18. Where were you employed before the last job?____________________

How long did you work there?____________________

19. Do you have any other special training other than that which you are now engaged in? Yes_____ No_____

Describe if yes.____________________

____________________

20. According to your present situation, where do you plan to work when you complete training?____________________

____________________

21. Will you be able to move to another location for employment?

Yes_____ No_____

22. Are you interested in working in or near your home town?

Yes_____ No_____

23. What is the name and address of a person you would like for us to contact concerning employment?

____________________
(Name)

____________________
(Address)

____________________
(City) (State)

24. Are you only interested in working out of the State? Yes____ No____

Where?____________________

25. When you complete training, how much would you consider as an acceptable hourly wage?

A. $1.00 per hour ______
B. $1.50 per hour ______
C. $1.75 per hour ______
D. $2.00 per hour ______
E. More than $2 ______

26. Are you interested in being placed on a job in which you can receive further training even though the wages may be a little less.

Yes______ No______

RESEARCH AND RETRAINING PROGRAM
TUSKEGEE INSTITUTE
TUSKEGEE INSTITUTE, ALABAMA

## Job Development Contact Sheet

______________________________ ______________________________
Job Development Officer(s) Date

1. Name of Person Contacted: ______________________________

Address: ______________________________ Telephone ______________

2. Title of Person Contacted: ______________________________

3. Firm or Organization: ______________________________

______________________________

4. Summary of Discussion:

A. Placement - Potential Number: ______________________________

Trades: ______________________________

______________________________

B. Potential Date(s) for Employment: ______________________________

C. Salary Discussed: ______________________________

D. Additional Information Requested by Potential Employer: ______

______________________________

5. Action Recommended: ______________________________

______________________________

6. Comments: ______________________________

______________________________

______________________________

# TUSKEGEE INSTITUTE
# RESEARCH EXPERIMENTAL & DEMONSTRATION PROJECT
# COURSE PERFORMANCE RATING

RATING LEGEND:
5 - Superior
4 - Above Average
3 - Average
2 - Below Average
1 - Unsatisfactory

Period Ending ____________
Class ____________
Time ____________
Teacher ____________

DIRECTIONS: Please rate each student in your class according to application, participation response to assignment, performance, and quality of work, industry, initiative, and responsibility.

| Trainees | Application | | | | | Participation response to assignment | | | | | Performance & quality of work | | | | | Industry | | | | | Initiative | | | | | Responsibility | | | | | Total perfor mance |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always diligent | Diligent most times | Applies sometimes | Seldom applies | Never applies | Cheerfully accepts | Cheerfully accepts most times | Accepts sometimes | Seldom accepts | Protests or indifferent | Always above average | Usually above average | Acceptable | Seldom acceptable | Unacceptable | Seeks additional work | Prepares work regularly | Needs occasional prodding | Needs constant pressure | Seldom works even under pressure | Actively creative | Consistently self | Frequently initiates | Seldom initiates | Merely conforms | Assumes much responsibility | Conscientious | Usually dependable | Somewhat dependable | Unreliable | |
| | 5 | 4 | 3 | 2 | 1 | 5 | 4 | 3 | 2 | 1 | 5 | 4 | 3 | 2 | 1 | 5 | 4 | 3 | 2 | 1 | 5 | 4 | 3 | 2 | 1 | 5 | 4 | 3 | 2 | 1 | |
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TUSKEGEE INSTITUTE
RESEARCH EXPERIMENTAL & DEMONSTRATION PROJECT
PERSONAL CHARACTERISTICS RATING

RATING LEGEND:
5 - Superior
4 - Above Average
3 - Average
2 - Below Average
1 - Unsatisfactory

Period Ending________________
Class_______________________
Time_______________________
Teacher____________________

DIRECTIONS: Please rate each student in your class according to honesty, punctuality, respect for authority, concern for others, physical fitness, and personal appearance.

| Trainees | Honesty | | | | | Punctuality | | | | | Respect for authority | | | | | Concern for Others | | | | | Physical Fitness | | | | | Personal Appearance | | | | | Total Score |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | Most times | Generally | Seldom | Never | Always | Most times | Sometimes | Seldom | Never | Always | Most times | Sometimes | Seldom | Never | Deeply | Generally | somewhat | Self-centered | Shows no concern | Always well and alert | Well and alert most times | Sometimes signs of physical weakness | Seldom shows physical fitness | Never seems well & alert | Always neat | Neat most times | Neat sometimes | Seldom neat - unkept | Poor Personal hygiene | |
| | 5 | 4 | 3 | 2 | 1 | 5 | 4 | 3 | 2 | 1 | 5 | 4 | 3 | 2 | 1 | 5 | 4 | 3 | 2 | 1 | 5 | 4 | 3 | 2 | 1 | 5 | 4 | 3 | 2 | 1 | |
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TUSKEGEE INSTITUTE OMPER PROJECT
Tuskegee Institute, Alabama

## Student Supporting Course Appraisal

Name____________________________ Date____________________________

Class____________________________ Instructor_______________________

DIRECTIONS: We are asking you to complete this form so that we can improve the training program. It is very important that you answer each question truthfully, just as you feel. Indicate your answer by placing a check mark opposite the answer of your choice.

EXAMPLE: What color is the United States Flag?

1. _____ white, green, and red.
2. __✓__ red, white, and blue.
3. _____ blue, yellow, and orange.

1. What do you think about this course?

   a. _____ Too hard; cannot understand the work.

   b. _____ Too easy; information already known.

   c. _____ Satisfactory; learning the information and enjoying the course.

2. Do you feel that you can afford to miss this class?

   a. _____ Often

   b. _____ Sometimes

   c. _____ Never

   Why?__________________________________________________

   ______________________________________________________

3. Do you think this course is necessary for you.

a. _____ Necessary

b. _____ Somewhat Necessary

c. _____ Not Necessary

Why?_______________________________________________

___________________________________________________

4. How do you perform in this class?

a. _____ Above many members of the class.

b. _____ About like the average of the class.

c. _____ Poorer than most members of the class.

5. What about the books you use?

a. _____ Too hard

b. _____ Satisfactory

c. _____ Too easy

Comments:__________________________________________

___________________________________________________

6. Do you feel free to talk in class?

a. _____ Yes

b. _____ No

Why do you feel this way?__________________________

___________________________________________________

7. If you could, would you like to give this course up?

a. _____ Yes

b. _____ Maybe

c. _____ No

Why? ____________________________________________

____________________________________________

TEACHER:

8. How does your teacher teach this course?

a. _____ Teaches subject matter most of the time.

b. _____ Seldom teaches subject matter.

c. _____ Never teaches subject matter.

9. How interesting does your teacher make the lesson?

a. _____ Interesting most of the time.

b. _____ Sometimes interesting.

c. _____ Not interesting.

10. Do you understand your teacher?

a. _____ Clear most times.

b. _____ Clear sometimes.

c. _____ Not clear most times.

11. How punctual is your teacher?

a. _____ Usually on time.

b. _____ Seldom on time.

c. _____ Never on time.

12. How friendly is your teacher?

a. _____ Usually friendly.

b. _____ Sometimes friendly.

c. _____ Not friendly.

13. Do you feel that you can talk to your teacher as much as you want to outside of class?

a. _____ Yes

b. _____ No

If No, explain. ________________________________________

________________________________________

## TUSKEGEE INSTITUTE OMPER PROJECT
Tuskegee Institute, Alabama

### Student Trade Course Appraisal

Name____________________ Date____________________

Shop____________________ Instructor____________________

DIRECTIONS: We are asking you to complete this form in an effort to help us determine how we can best improve the OMPER Program. Please answer each question truthfully and just as you feel by placing a check mark opposite the answer of your choice.

EXAMPLE: What color is the United States Flag?

1. _____ white, yellow, and green.
2. __✓__ red, white, and blue.
3. _____ green, red, and white.

1. From the trades offered in this project, do you think this trade is best for you?

    a. _____ Yes

    b. _____ Not too sure

    c. _____ No

    Why? (Explain briefly)________________________________________

    ________________________________________________________

2. Why did you choose this trade?________________________________

    ________________________________________________________

3. Do you wish you could choose a different trade now?

    a. _____ Yes

    b. _____ Not too sure

    c. _____ No

(If Yes, which trade would you choose?)

_____ Brickmasonry
_____ Carpentry
_____ Meat Processing
_____ Other (Name)

Why? (State briefly) ________________________________________

________________________________________________

4. What do you think about this trade course?

   a. _____ Too hard; cannot do the work.

   b. _____ Too easy; information already known.

   c. _____ Satisfactory; learning and enjoying the course.

5. What do you think of your textbook and reading materials?

   a. _____ Too hard

   b. _____ Satisfactory

   c. _____ Too easy

6. What do you think of tools and materials you have to work with?

   a. _____ Too much

   b. _____ Adequate

   c. _____ Inadequate

7. How do you perform in this class?

   a. _____ Above many members of the class.

   b. _____ About like the average of the class.

   c. _____ Poorer than most members of the class.

8. Do you feel that you can afford to miss this class?

a. _____ Often

b. _____ Sometimes

c. _____ Never

9. Do you understand your teacher?

a. _____ Clear most times

b. _____ Clear sometimes

c. _____ Never clear

10. How interesting does your teacher make the lesson?

a. _____ Interesting most of the time

b. _____ Seldom interesting

c. _____ Never interesting

11. How punctual is your teacher?

a. _____ Usually on time

b. _____ Seldom on time

c. _____ Never on time

12. How friendly is your teacher?

a. _____ Usually friendly

b. _____ Sometimes friendly

c. _____ Not friendly

13. Do you feel that you can talk to your teacher as much as you want outside of class?

a. _____ Yes

b. _____ No

If No, explain.________________________________________

________________________________________________

PROGRAM:

14. What did you expect from this program upon entering?

a. _____ Money to improve your living conditions.

b. _____ Learn a trade and get paid for learning.

c. _____ Prepare yourself for a better job.

d. _____ Other (Explain)

15. What do you expect from the program now?

a. _____ Become prepared for a better job.

b. _____ Continue to draw subsistence and training allowance.

c. _____ Financial assistance until a better paying job can be found.

d. _____ Other (Explain)

16. Would you leave the program now if you could draw more money from compensation or received a job paying more money?

a. _____ Yes

b. _____ Maybe

c. _____ No

Why? (Explain briefly)________________________________________

________________________________________________

FUTURE PLAN:

17. What do you expect to do when this program ends?

a. _____ Get a job related to your trade.

b. _____ Open business.

c. _____ Continue schooling.

d. _____ Return to previous occupation.

e. _____ Enroll in another OMPER Program somewhere.

f. _____ Other (Explain briefly)

18. Where do you expect to live after you complete this program?

a. _____ Remain in my present community.

b. _____ Move to another part of Alabama.

c. _____ Move to another state.

d. _____ Other (Explain)